

Title: The Case of the Missing Shape

Brief Overview:

This lesson introduces students to shape attributes and new shapes. It is expected that students are familiar with identifying squares, circles, triangles, and rectangles before this lesson. During this lesson students will become detectives working for “Poly Gon” to help her rescue a kidnapped shape. Students will learn to identify trapezoids, parallelograms, and hexagons by their attributes.

NCTM Content Standard/National Science Education Standard:

Analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships.

Grade/Level:

Grades 2 and 3

Duration/Length:

Three class sessions, approximately 50 minutes per sessions

Student Outcomes:

Students will:

Identify the attributes of a shape: such as size, number of sides, number of corners

- Identify shapes by name: square, circle, rectangle, triangle, hexagon, parallelogram, trapezoid
- Identify right angles
- Identify shapes as quadrilaterals and polygons

Materials and Resources:

Day1

- Animal attribute cards (Teacher Resource 1A-C)
- Set of shapes (Teacher Resource 2)
 - Each resource sheet needs to be copied onto 4 different colors, red, blue, yellow, and green. They should be cut prior to the lesson. You may want to mount them on cardboard and laminate. They will be used several times by the students.
 - Yardstick
 - Figure it out worksheet (Student Resource 1)
 - 1A for on level students
 - 1B for Reteach
 - 1C for Enrich
 - Scissors and glue for enrichment students’ worksheet

Day 2

- Set of shapes (from Teacher Resource 2 Day 1)
- Detective notes stapled together for each student (Student Resource 2)
- Detective notes teacher edition (Teacher Resource 4A-H)
- Shape name cards (Teacher Resource 5A-H)
- Overhead spinner (Teacher Resource 6)
 - Copy this spinner onto a transparency
 - Use a paperclip and a pencil as the spinner
- Assessment letter (Student Resource 3)
 - 3A for on grade level
 - 3B for Reteach
 - 3C for Enrich

Day 3

- Set of Shapes from (Teacher Resource 2, Day One)
- Matching worksheet (Student Resource 4)
 - 4A for Reteach
 - 4B for on grade level and enrichment
- Transparency of Shape Chart (Teacher Resource 5)
- Game Instructions (Teacher Resource 6)
- Game board (Teacher Resource 10)
- Game Cards (Teacher Resource 11)
- Detective log (Student Resource 6)
- Game Tokens
- Dice
- Summative assessment (Student Resource 5)

Development/Procedures:

Day 1

- Pre-assessment

Tell students that you have received an email from Poly Gon and here is what it says:

Dear (*state your name*),

I am Poly Gon, keeper of all closed shapes in the nation. Ask students to describe a polygon. It is my job to keep shapes of all sizes and colors safe. But something has gone wrong! One of my shapes has been kidnapped and taken to that 4 sided island called Quadriland. Ask students why a 4 sided island might be called Quadriland and describe quadrilaterals. But what is worse is I don't even know who it is! What if the shape that was taken feels out of place and does not fit in in Quadriland? I need the help of your classroom detectives to solve this case. Do you have any detectives who can help me? In order to solve this case the detectives have to prove they can be on the ball. Their first task is to describe what they see in these 3 pictures (Teacher Resource 1A-C).

Display Teacher Resource 1A-C, to students and ask students to describe each animal. Record students' answers under each picture. Direct discussion away from

the type of animal is and discuss the attributes of each animal. i.e. teacher resource 1B “a mammal that is covered in fur”).

- Can you describe it in another way?
- What color/shape/size do you see?
-

Inform students that what they are naming are the attributes of an object. Define attributes as the **characteristics of an object**.

○ Exploration

Give each student a shape (Teacher Resource 2A-H Using a yardstick as a gate, play “Gate Keeper.” Think of an attribute such as color. Have a group of students line up at the gate. Have each student present their shape. If it fits the attribute you are thinking of, lift the gate and allow the student to pass through. If it doesn’t fit the attribute, have the student take their seat. After all the students have presented their shape, have students think, pair, and share why certain shapes were allowed to pass through the gate and others were not allowed.

Use the following questions to facilitate a discussion:

- Why were some shapes allowed to pass?
- Why were some shapes not allowed to pass?
- How could you change your shape so it could have passed?

Continue to play the game using the attribute, three sides. Think, Pair, Share which attribute was allowed to pass through the gate.

○ Explanation

Explain to students that only shapes that have a common attribute were allowed to pass through the gate. Identify the attributes that have been discussed.

- Color, size, number of sides (3)

Play game again using the attribute **right angles**. Lead students in a discussion about right angles.

- Display a square and trace the right angles.
- Display a rectangle and trace the right angles and compare them to the right angles on the square.
- Ask students to identify a letter that looks like a right angle (the letter L).
- Display a hexagon and trace the angles. Ask students if the angles on a hexagon are right angles.

Identify right angles found in the room.

- If students are demonstrating difficulty finding right angles instruct them to make an “L” with their fingers and look for shapes that match the “L” shape made by their fingers.

Play the game again with the attribute, **4 sides**. Lead students in a discussion about four sided shapes being quadrilaterals.

- Hold up several 4 sided shapes and ask students what they have in common. (4 angles)

- Ask students if all quadrilaterals have right angles. Hold up a parallelogram to demonstrate to students that not all quadrilaterals have right angles. Have all students with quadrilaterals stand up and hold their shape up for the class to see.

- Application

Have students exchange shapes. Choose a student to be the gate keeper while the other students again present their shapes. Students think, pair, and share to determine which attribute the gate keeper was allowing to pass through. Repeat this 2 or 3 times with different students acting as gatekeeper. Collect the shapes by describing the attributes of each shape. For example:

- Bring me all the shapes with 4 sides and no right angles.
- Bring me all the shapes with 3 sides.
- Bring me all the red shapes.
- Bring me all the shapes with no sides and no angles.
- Bring me all the remaining large shapes.
- Bring me all the shapes with right angles.
- Bring me all the shapes with more than 4 angles.

- Differentiation

Distribute shape attribute worksheet to the students to complete independently.

- On level
Provide students with Student Resource 1A.
- Reteach
Provide students with Student Resource 1B.
- Enrich
Provide students with Student Resource 1C-D. Answer keys can be found on Teacher Resource 3A-C.

Day 2

- **Engagement**

Inform students that you received another email from Poly Gon and want to share it with the class:

Dear (*insert your name*),

How did all the detectives do with yesterday's task? Are they able to identify all the different attributes? I am really worried about the missing shape.

Sincerely,

Poly

Have students recall attributes identified on Day 1. Use the following questions to facilitate discussion:

- What is an attribute?
- What attributes did we sort by yesterday?
- What attributes do shapes have?

Record student answers on chart paper or on the chalkboard.

Review right angles by identifying objects in the room that contain right angles.

- Who can remember the names of the shapes that have right angles?
- Can you identify any right angles in our classroom?
- Do shapes need to have 4 sides to contain a right angle?

Identify objects in the room that are quadrilaterals

- What is a quadrilateral?
- What is a shape that is a quadrilateral?
- Can you identify any quadrilaterals in the classroom.
- Do quadrilaterals need to have right angles?"

○ Exploration

Divide students into groups of 3 or 4. Randomly distribute shapes to groups (Teacher Resource 2). Direct groups to sort their shapes by attributes of their choice. **Students will describe** and share one of their groups and name the attribute they used to sort their shapes. Question students about what shapes met their attribute and what shapes did not share that attribute:

- What attribute did you use to sort your shapes?
- What shapes had your attribute?
- What shapes did not have your attribute?
- How could you change a shape so it would have your attribute?

Exchange shapes among the groups and direct students to sort by a different attribute.

○ Explanation

Inform the students that the object of the lesson is to **identify shapes by not only their attributes but by name**. Poly has sent them detective notebooks to help them organize the names and attributes. Distribute the detective notebooks (Student Resource 2A-H). Model completing detective notes (DN) on page one with the squares. See Teacher Resource 4A-H for answers.

Ask students to identify shape on page 2 and record observations as a group. Direct students to work with partners to complete page 3 and share answers with the class. Direct students to complete page 4 independently and review as a class. *If students are have difficulty identifying attributes give student pattern blocks to use as a manipulative to help them feel the number of sides and vertices.*

Inform students that the shape on page 5 is a parallelogram and ask students to count the number of sides and angles. Ask students to identify the meaning of “parallel” (**lines that stay the same distance apart and will never meet**). Refer to square and rectangle for examples.

Direct students to complete page 6 with a partner and discuss as a class

- How is the trapezoid different from other shapes that we have seen?
- How is it the same?

Direct students to complete page 7 with a partner and discuss as a class.

Ask students to identify which shapes in the book are quadrilaterals.

If students are have trouble identifying shapes as quadrilaterals have students write a “Q” in the corner of all pages that have quadrilaterals on them.

Collect notes from students to be redistributed and used as a reference on Day 3.

- Application
Post Shape names around the room (Teacher Resource 5A-G). Direct students to look around the room for the shape name cards and choose one to stand under. Explain to students that they will be playing a game similar to four corners. You will spin the overhead spinner (Teacher Resource 6) which will land on a shape. Students who are standing under the name of that shape will sit down. After each spin the remaining students may move to another shape name to stand under. Game continues until only one student is left standing. Repeat the game if time allows.

To aid struggling students redistribute their detective notes to use as a reference.

- Differentiation
 - On Level
Direct students to write a note to Poly telling her what they have learned about shapes and attributes.
 - Reteach
Distribute Student Resource 3B.
 - Enrich
Distribute and have students complete Student Resource 3C.

Day 3

- Engagement
Display several shapes (Teacher Resource 2) on board for students to see. Play “I Spy” by choosing a shape and identifying its attributes. Example: If you choose the large green trapezoid you would begin by saying, “*I spy a polygon that is green.*” Allow one student to make a guess. “*The small green triangle.*” Give another attribute. “*I spy a quadrilateral.*” Allow another student to make a guess. “*The large green square.*” Give another attribute. “*I spy a polygon with 2 parallel sides.*” Allow another student to make a guess. Once the shape is identified begin again with a new shape. Repeat the game 3 or 4 times.
- Exploration
Distribute shape matching worksheet (Student Resource 4A-B) to the students. Distribute Resource 4A for students who understand the concept. Students who need reteaching can use Student Resource 4B. Observe as students work.
- Explanation
Create a shape/name/attribute chart on the overhead (Teacher Resource 8A-B). Use the following questions for students to complete the chart.
 - What shape has no sides?
 - What shape has only 3 sides? Can you draw it?

- Application
Students will play Quadriland to find out which shape was stolen. Redistribute detective notes from Day 2. Divide class into groups of 3-4. Distribute Detective Logs (Student Resource 5) to each student. Distribute a game board and a set of cards to each group (Teacher Resource 10 and 11).

Read rules to students (Teacher Resource 9). Model with 2 or 3 students several rounds of the game. Monitor student progress throughout the game and give aid when necessary.

Summative Assessment:

After students play the game, inform students that you have received another email from Poly that said:

Dear (your name),
Thank you so much for helping me figure out which of my shapes was missing! I was so worried and your detectives did a great job helping me. I have one more task for your detectives to do. I need them to fill out a case summary so I know what they learned by helping me. I know they will do a great job filling out their reports. Make sure you tell them how wonderful they are!
Thank you,
Poly Gon

Distribute summative assessment to students to complete individually. (Student Resource 6). Answer key can be found on Teacher Resource 12A-B.

Authors:

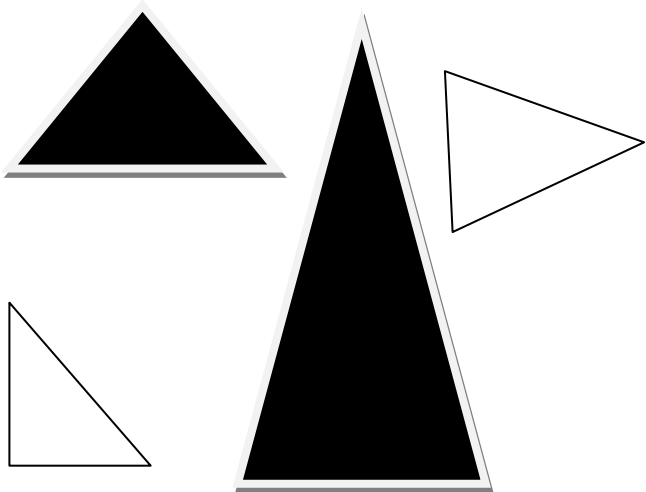
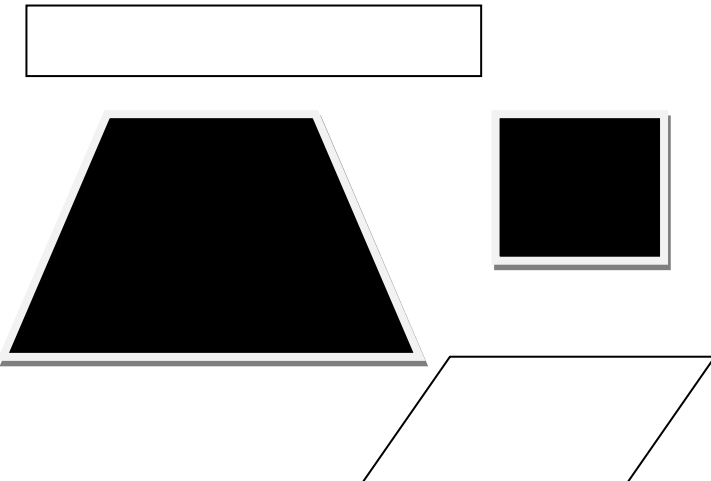
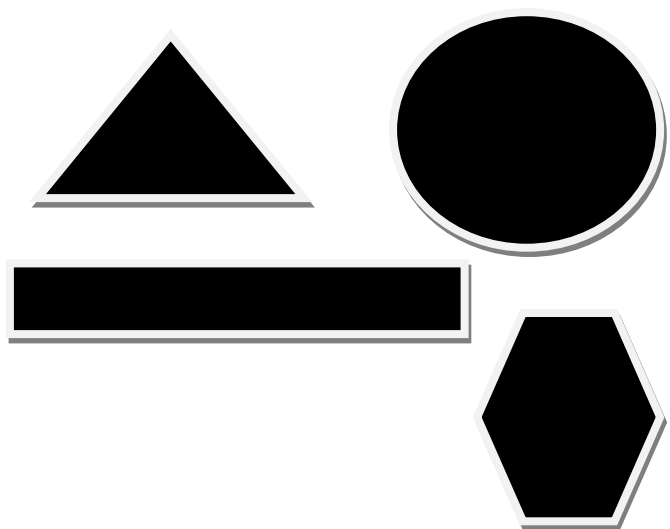
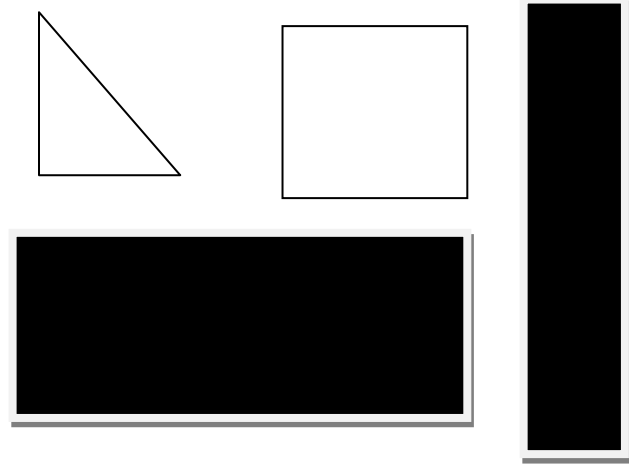
Beverly Folkoff
Powhatan Elementary School
Baltimore County Public Schools

Tracey Sacks
Randallstown Elementary School
Baltimore County Public Schools

Name: _____ Date: _____

Figure It Out!

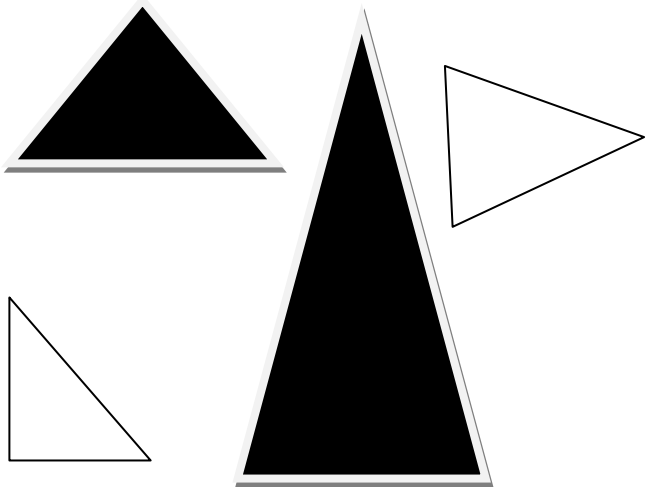
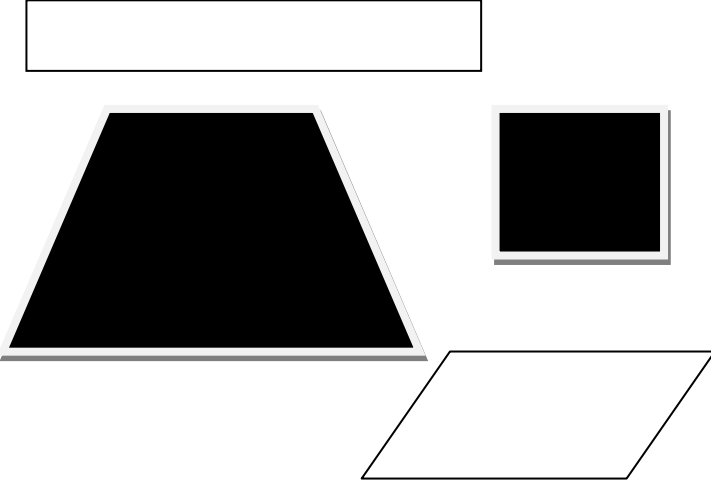
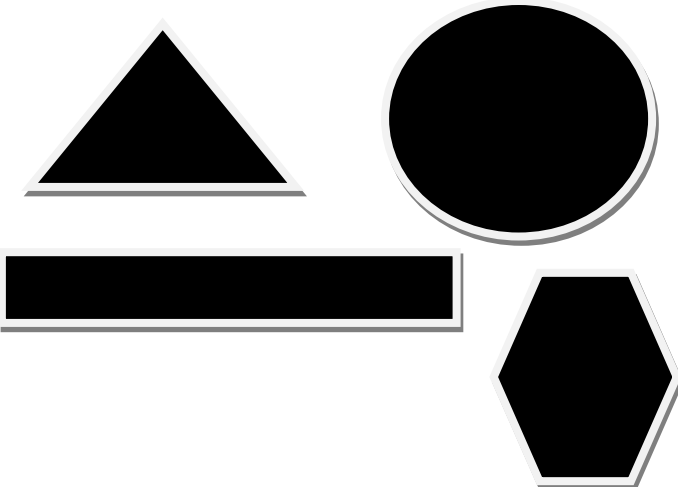
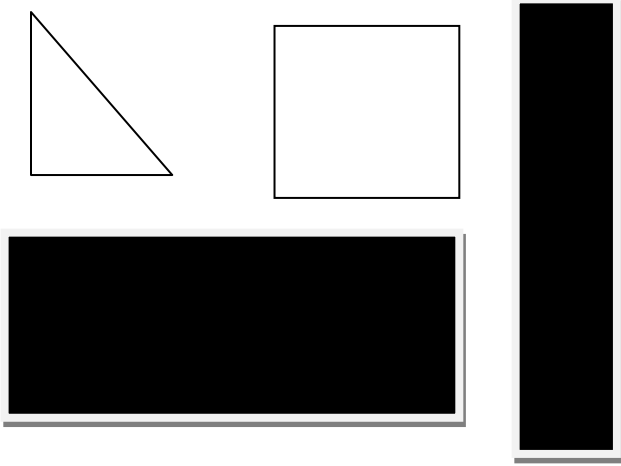
Directions: Look at each group of shapes. Decide what attribute they all share and write the attribute on the line under each group of shapes.

 _____	 _____
 _____	 _____

Name: _____ Date: _____

Figure It Out!

Directions: Look at each group of shapes. Decide what attribute they all share and circle the attribute.

 <p>3 sides right angle 4 corners</p>	 <p>Color 4 sides 3 corners</p>
 <p>Color 3 sides no sides</p>	 <p>3 sides right angle 4 corners</p>

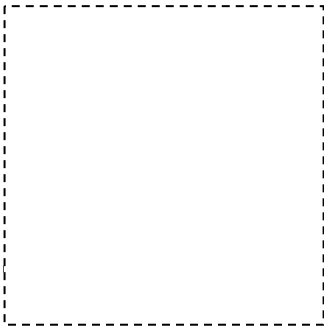
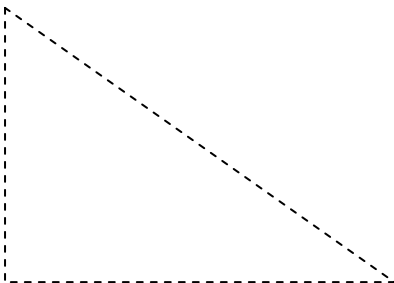
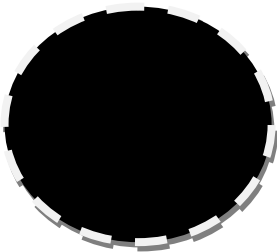
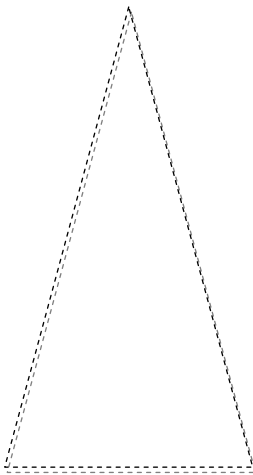
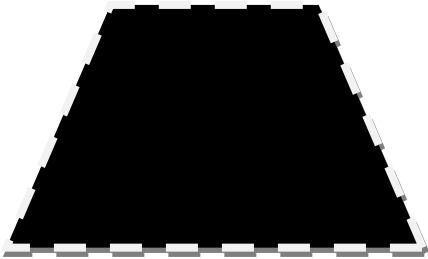
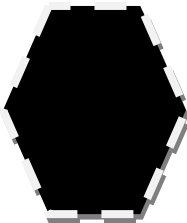
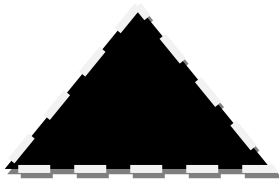
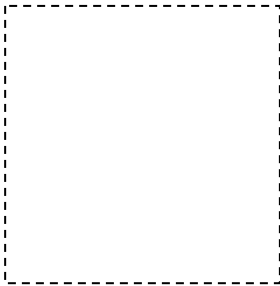
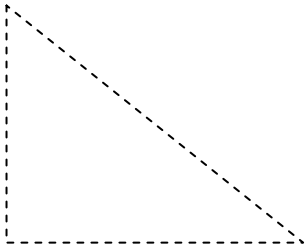
Name : _____ Date: _____

Can You Sort It?

Directions: Cut out the shapes on the attached page. Paste into the boxes based on attribute. Some shapes may have more than attribute. Place the shape in only one box.

3 sides, 3 angles	4 sides, 4 angles
color	Right angles

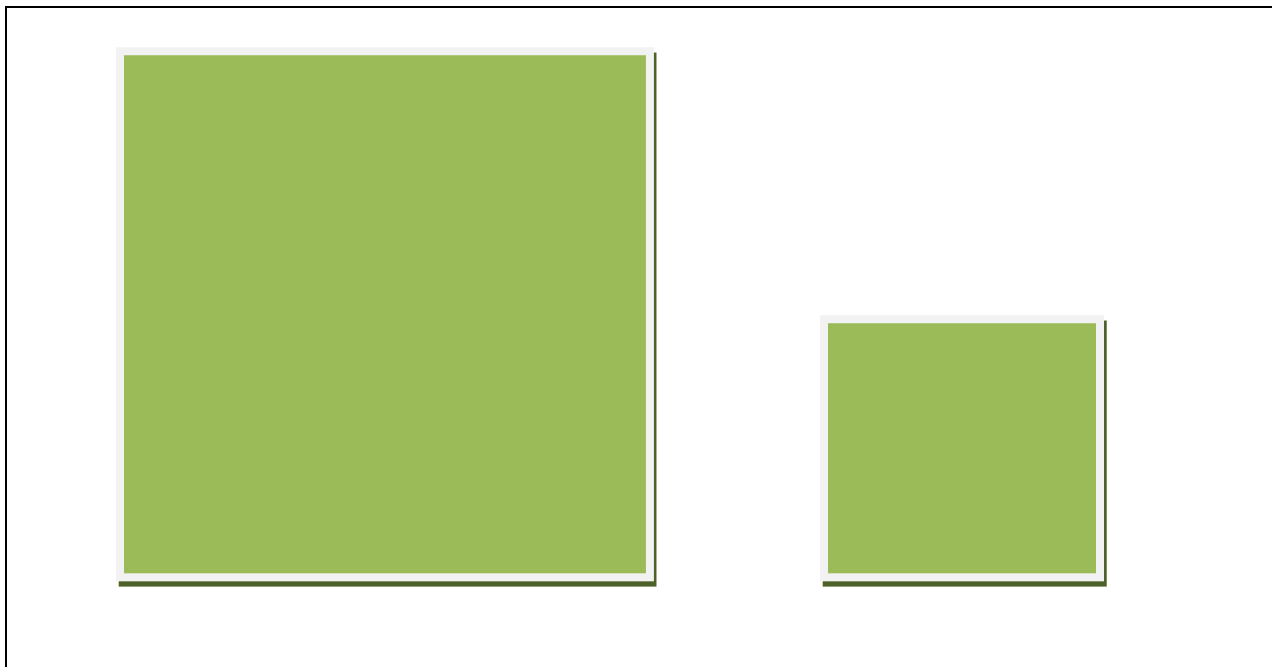
Cut out the following shapes and glue them into the correct boxes.



Detective Notes

Name of Detective:



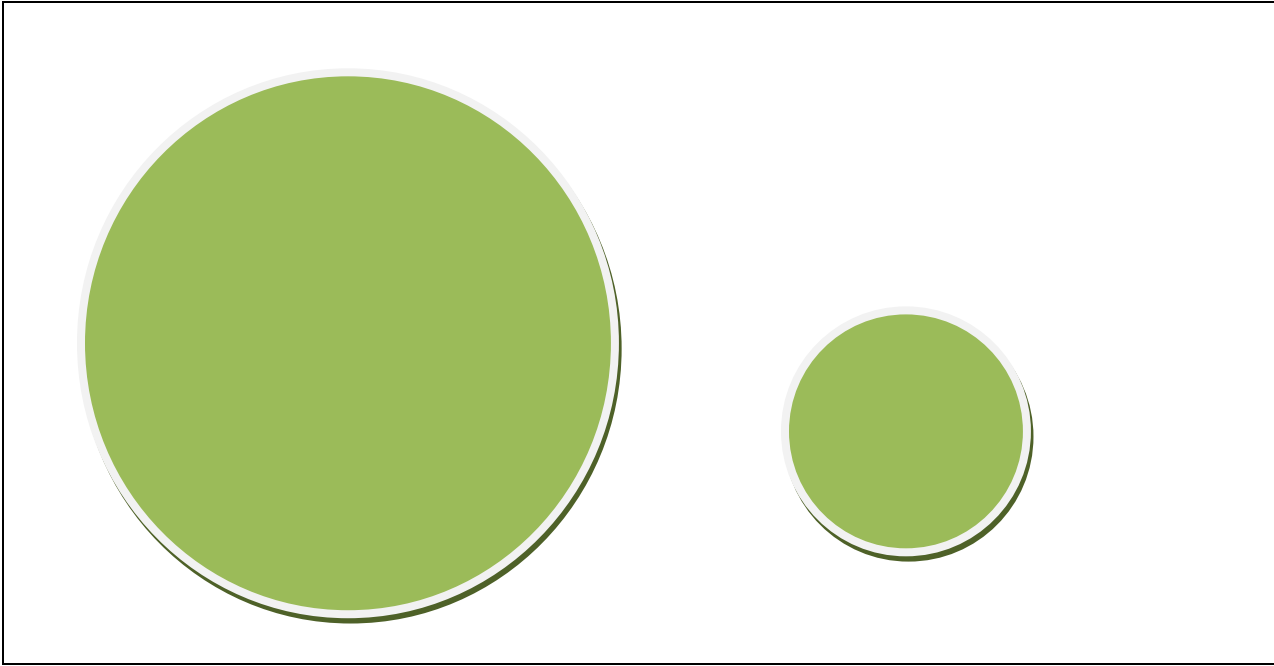


These are _____.

They have _____ sides.

They have _____ angles.

Other observations:

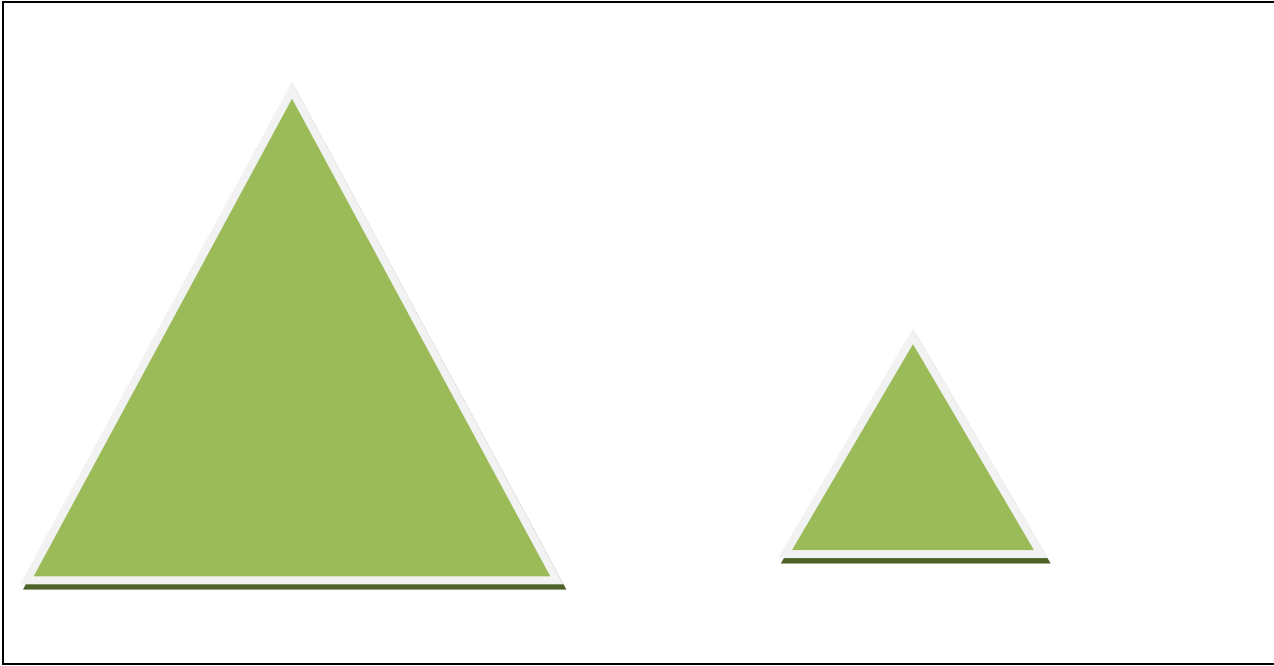


These are _____.

They have _____ sides.

They have _____ angles.

Other observations:

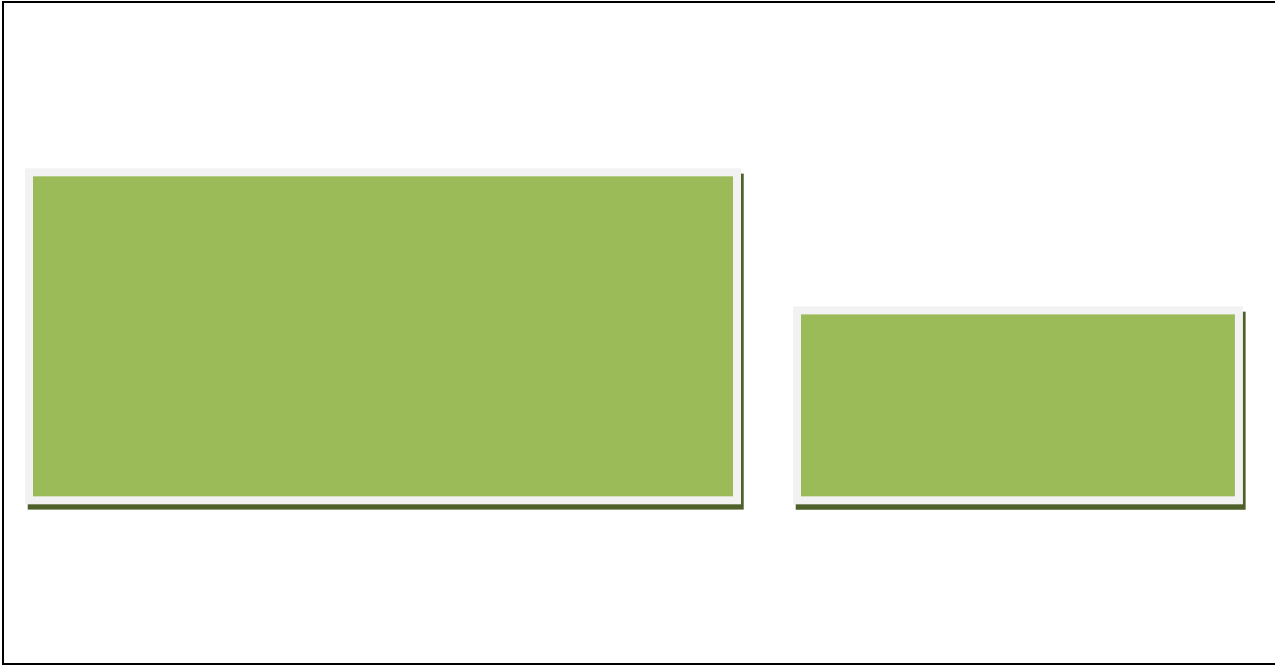


These are _____.

They have _____ sides.

They have _____ angles.

Other observations:

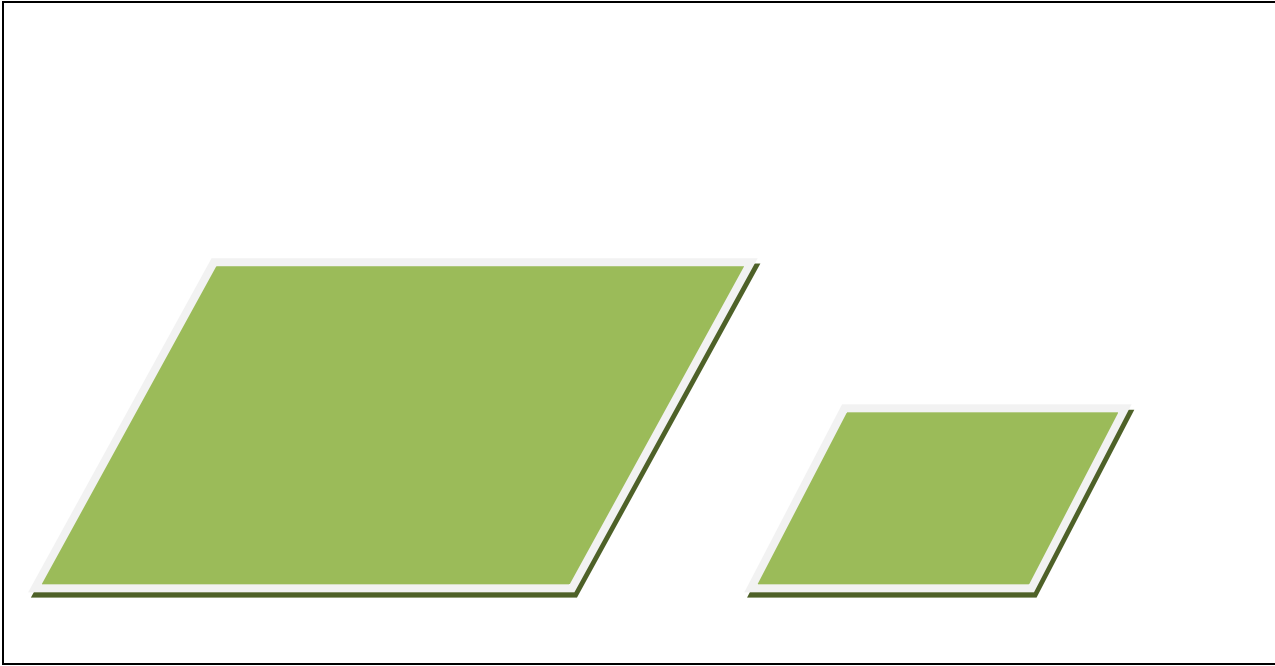


These are _____.

They have _____ sides.

They have _____ angles.

Other observations:

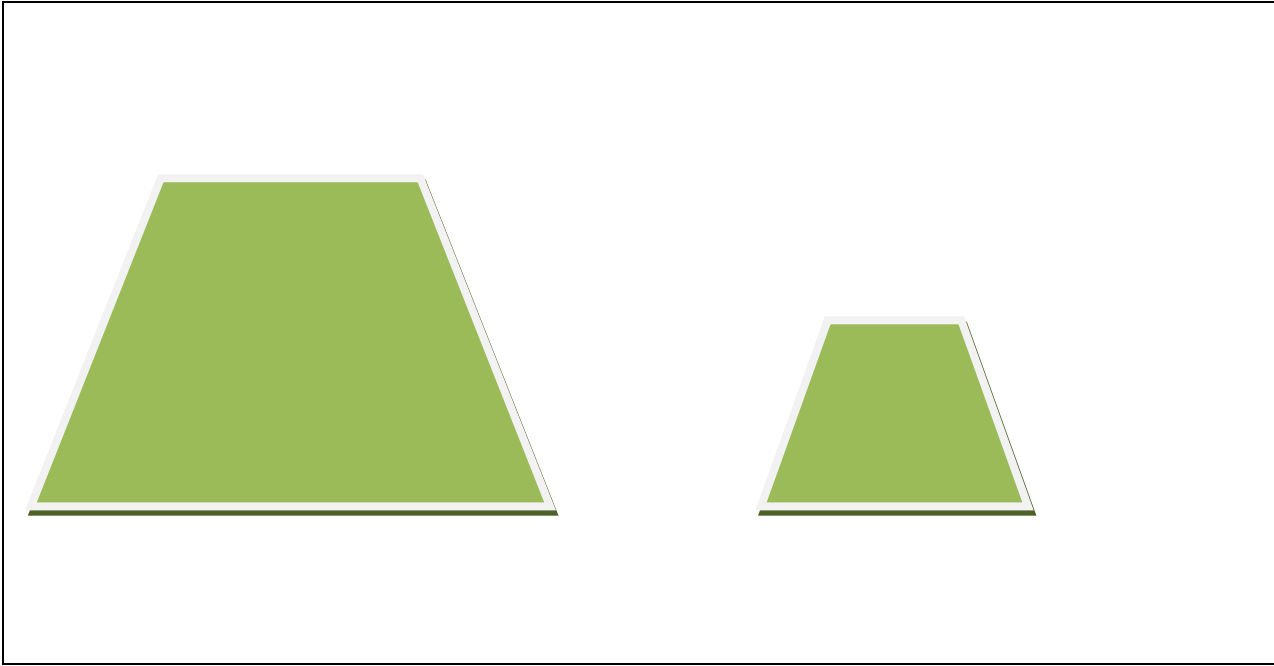


These are parallelograms.

They have _____ sides.

They have _____ angles.

Other observations:

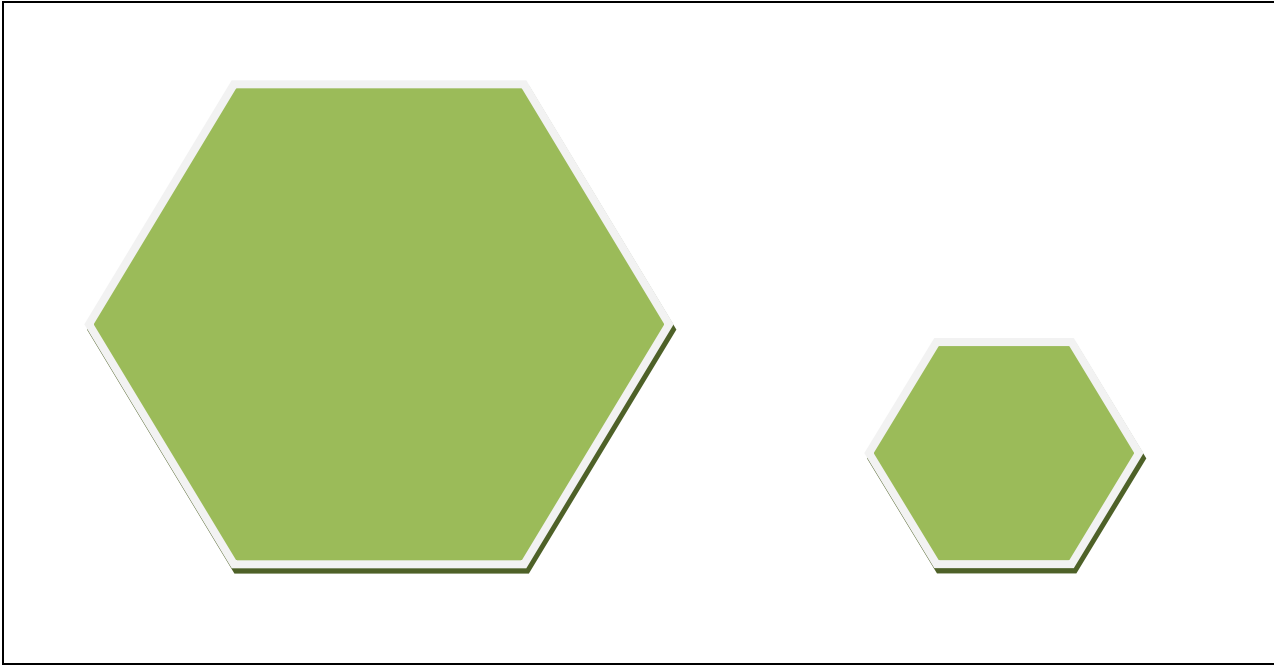


These are trapezoids.

They have _____ sides.

They have _____ angles.

Other observations:



These are hexagons.

They have _____ sides.

They have _____ angles.

Other observations:

Write a letter to Poly telling her what you have learned about shapes and their attributes. Choose 4 shapes to talk about, but no more than 2 may be quadrilaterals. Use the words in the Word Bank to help you! The words may be used more than once.

sides hexagon parallel corners right angle

square trapezoid rectangle circle

triangle parallelogram

Dear Poly,

I learned that _____

Your friend,

Write a letter to Poly telling her what you have learned about shapes and their attributes. Use the words in the Word Bank to help you! You will use some words and numbers more than once and others not at all.

4	trapezoid	6	angles	
triangle	3	circle	parallel	rectangle

Dear Poly,

I learned that a **square** has _____ sides and _____ right angles. A **parallelogram** also has _____ sides and the opposite sides are _____. A _____ has no sides and no angles. A hexagon has _____ sides and _____ corners. I really learned a lot. My favorite shape was a _____.

Your friend,

Write a letter to Poly telling her what you have learned about shapes and their attributes. Choose 4 shapes to talk about, but no more than 2 may be quadrilaterals.

Dear Poly,

I learned _____

Your friend,

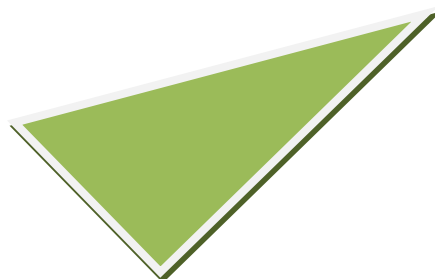
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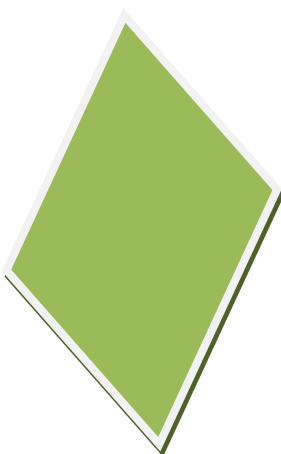
Name That Shape

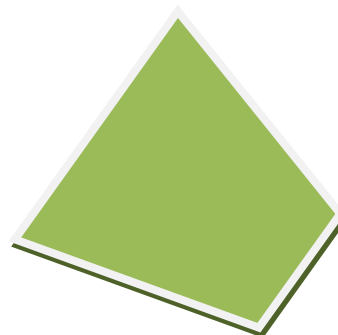
Directions: Write the name of each shape on the line under the shape!
 You can use the word bank to help you if you need it

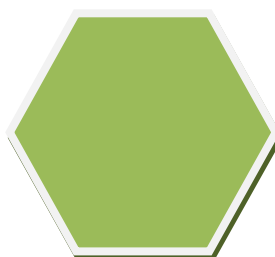
Square	Hexagon	Circle	Parallelogram
Trapezoid	Triangle	Rectangle	







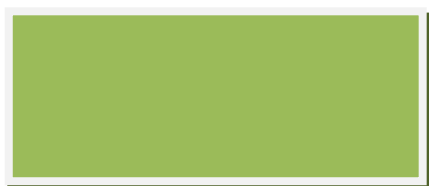




Name: _____ Date: _____

Name That Shape

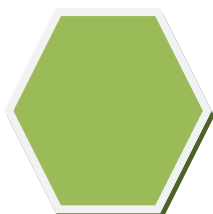
Directions: Draw a line from each shape to its name!



Triangle

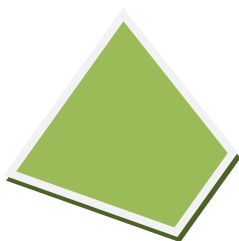


Rectangle



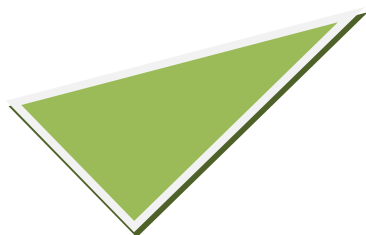
Circle

Parallelogram



Hexagon

Square



Trapezoid

Detective Log Colors and Size			
Large Red		Small Red	
Large Blue		Small Blue	
Large Green		Small Green	
Large Yellow		Small Yellow	
Sides and Other Attributes			
Square			
Circle			
Triangle			
Rectangle			
Trapezoid			
Parallelogram			
Hexagon			

Detective: _____

Detective Log Colors and Size			
Large Red		Small Red	
Large Blue		Small Blue	
Large Green		Small Green	
Large Yellow		Small Yellow	
Sides and Other Attributes			
Square			
Circle			
Triangle			
Rectangle			
Trapezoid			
Parallelogram			
Hexagon			

Detective: _____

Case Summary

Help Poly one last time by completing the Case Summary. Answer the questions as best you can!

Detective's name: _____

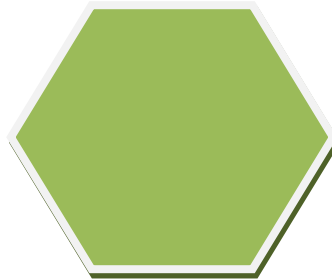
What was the missing shape: _____

1) Which attributes matches your shape? (you may pick more than one)

- ☐ a 4 sides
- ☐ b right angles
- ☐ c 3 sides
- ☐ d no sides
- ☐ e all sides equal
- ☐ f 6 sides

2) What is the name of this shape

- ☐ a square
- ☐ b parallelogram
- ☐ c hexagon



3) Parallel means

- ☐ a Lines will never touch
- ☐ b Lines form a corner
- ☐ c A dance move

Brief Constructed Response

Hi Detective! You have done such a great job finding out which shape was kidnapped! Now I need you to answer one more question. Finish this BCR and the Case of the Missing Shape will officially be solved!

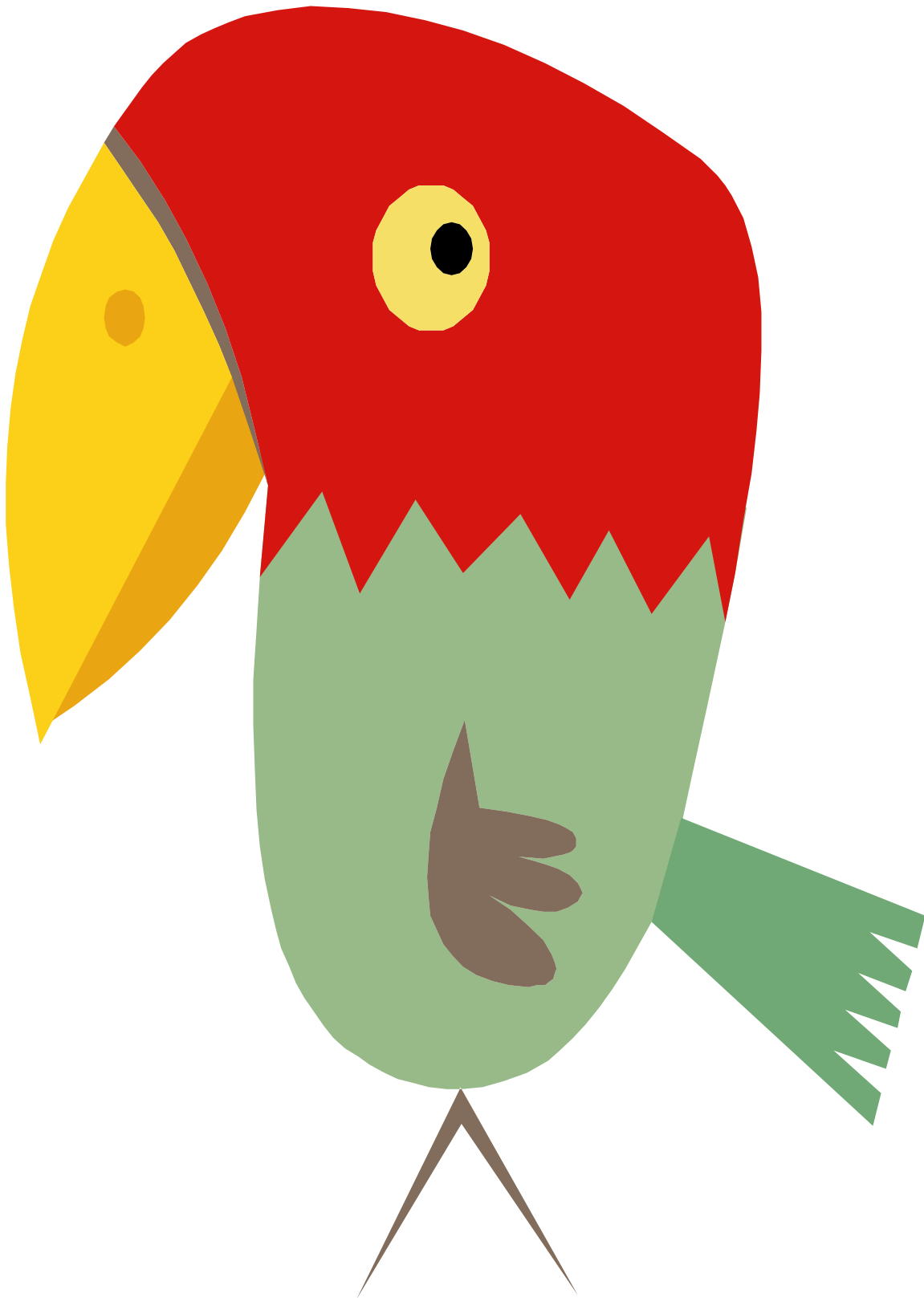
Your friend,
Poly

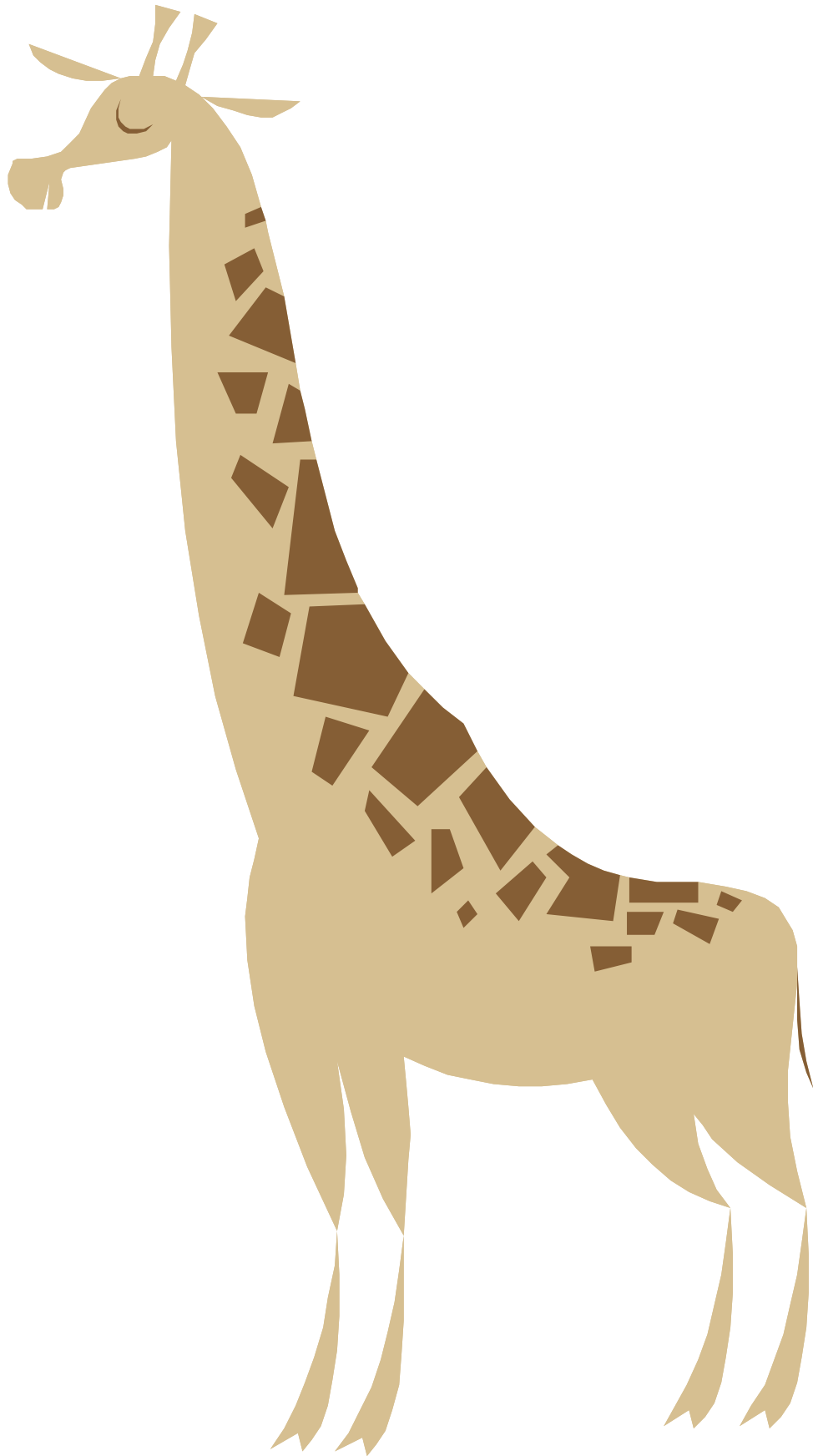
Part A

In your game, which shape was taken to Quadriland?

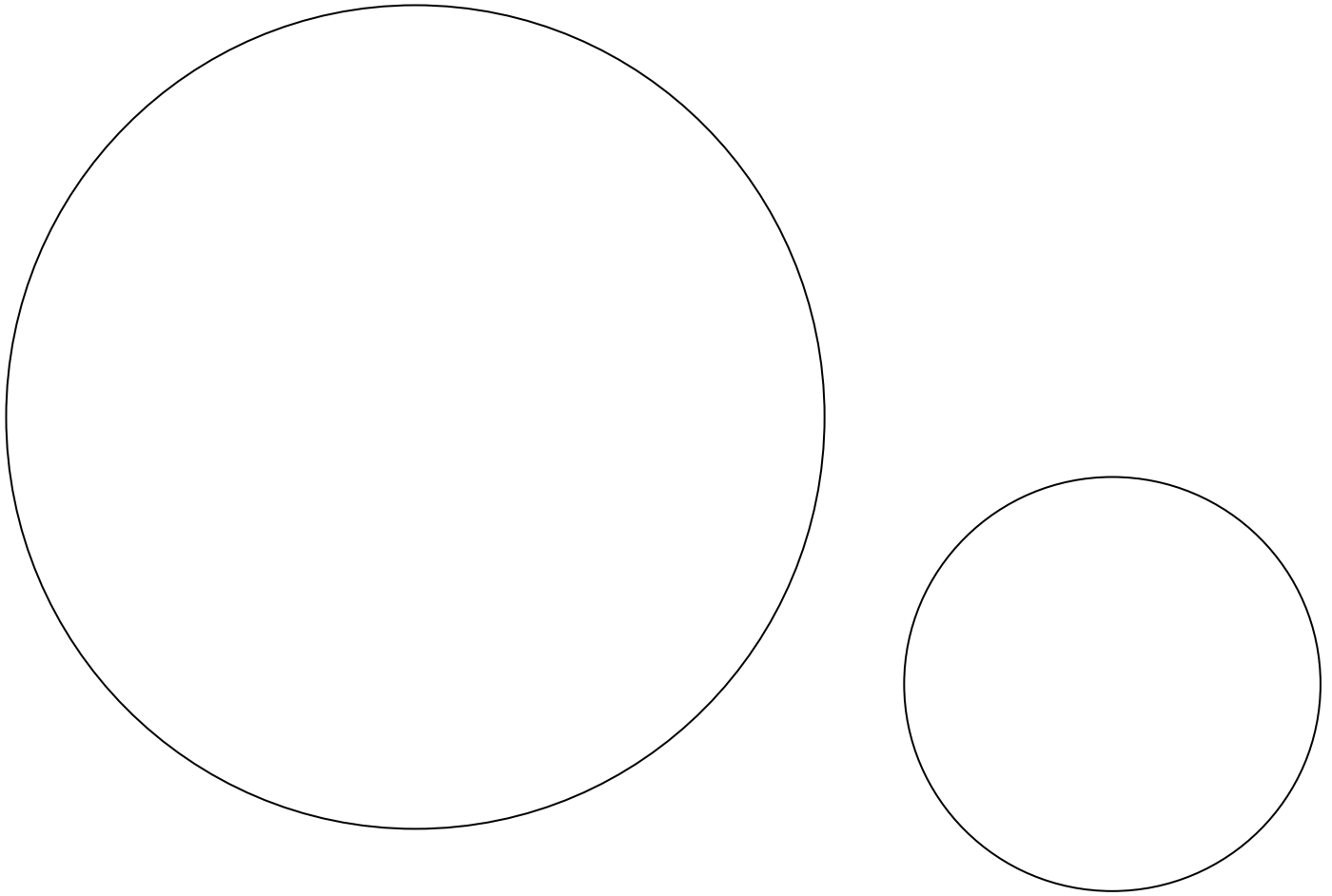
Part B

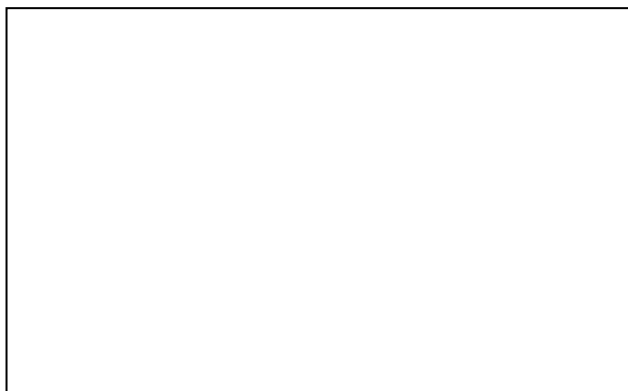
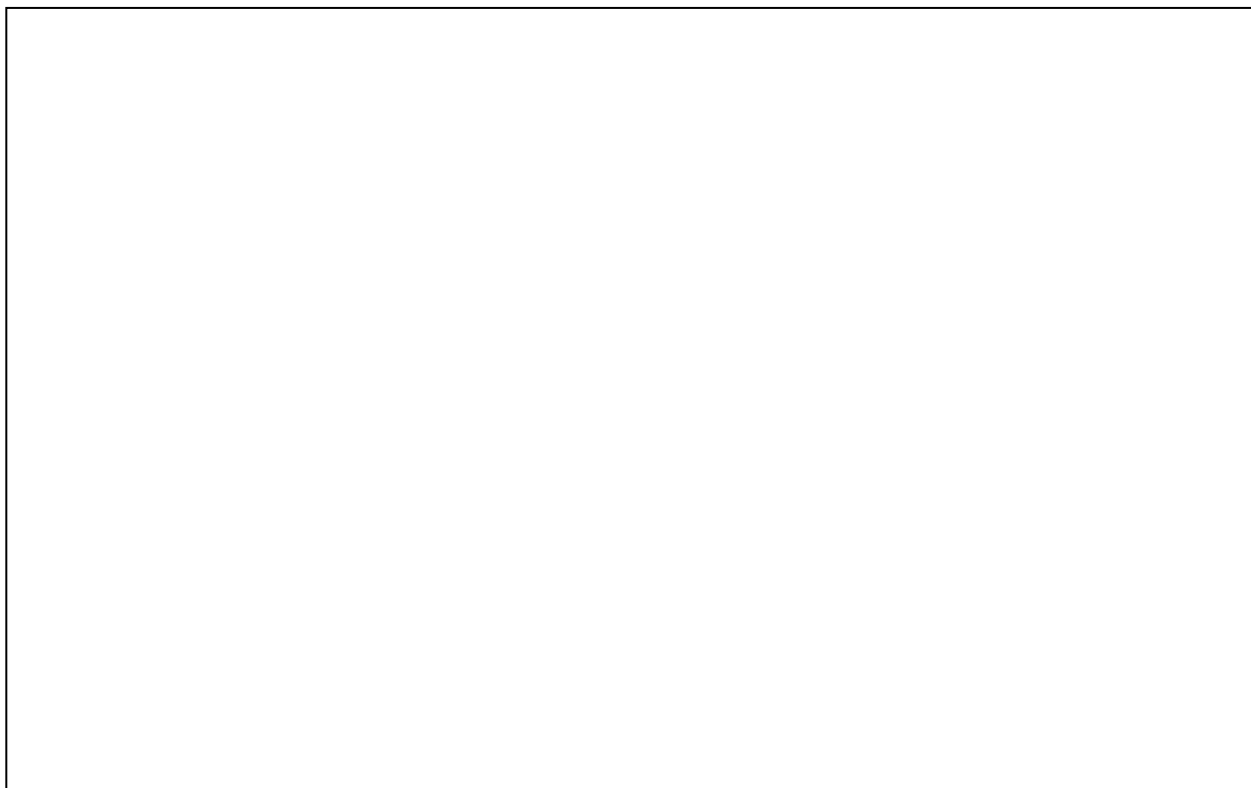
Did the shape belong in Quadriland? Use what you know about shape attributes and quadrilaterals to explain why your answer is correct. Use numbers words in your explanation.

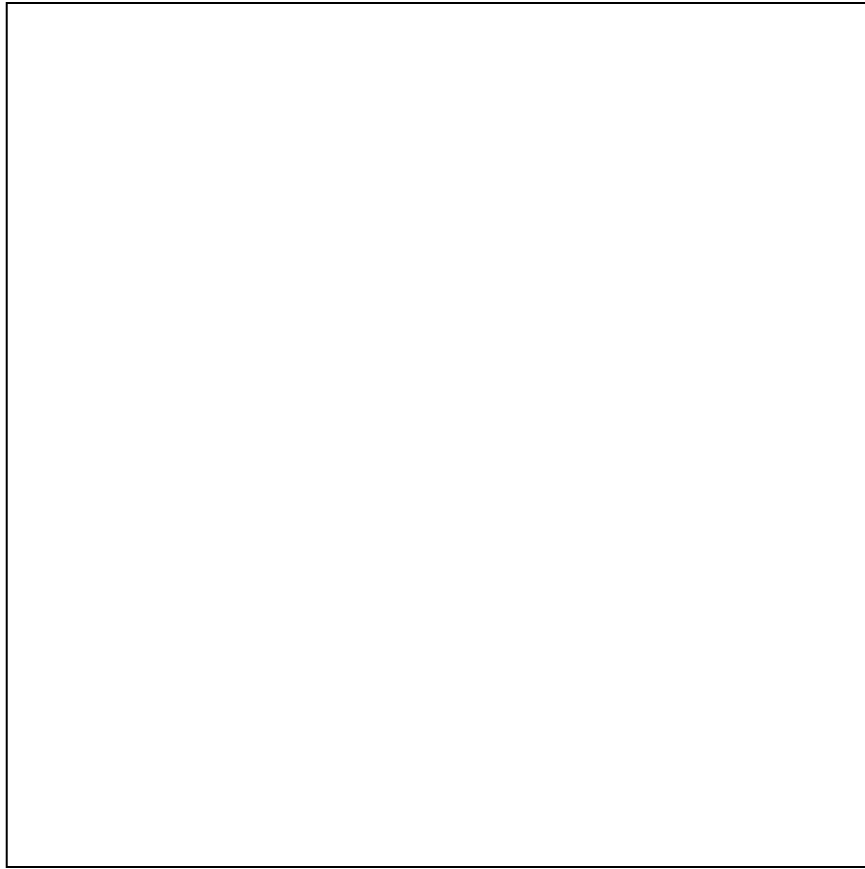


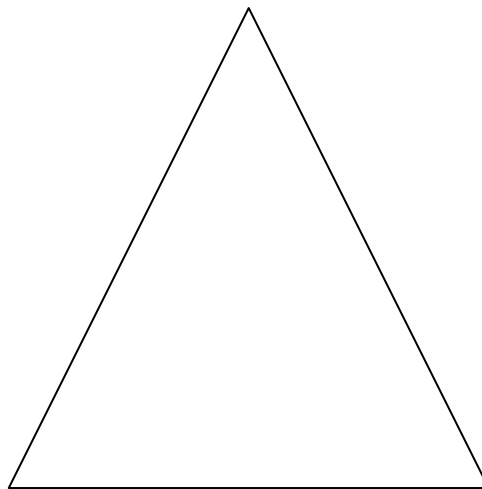
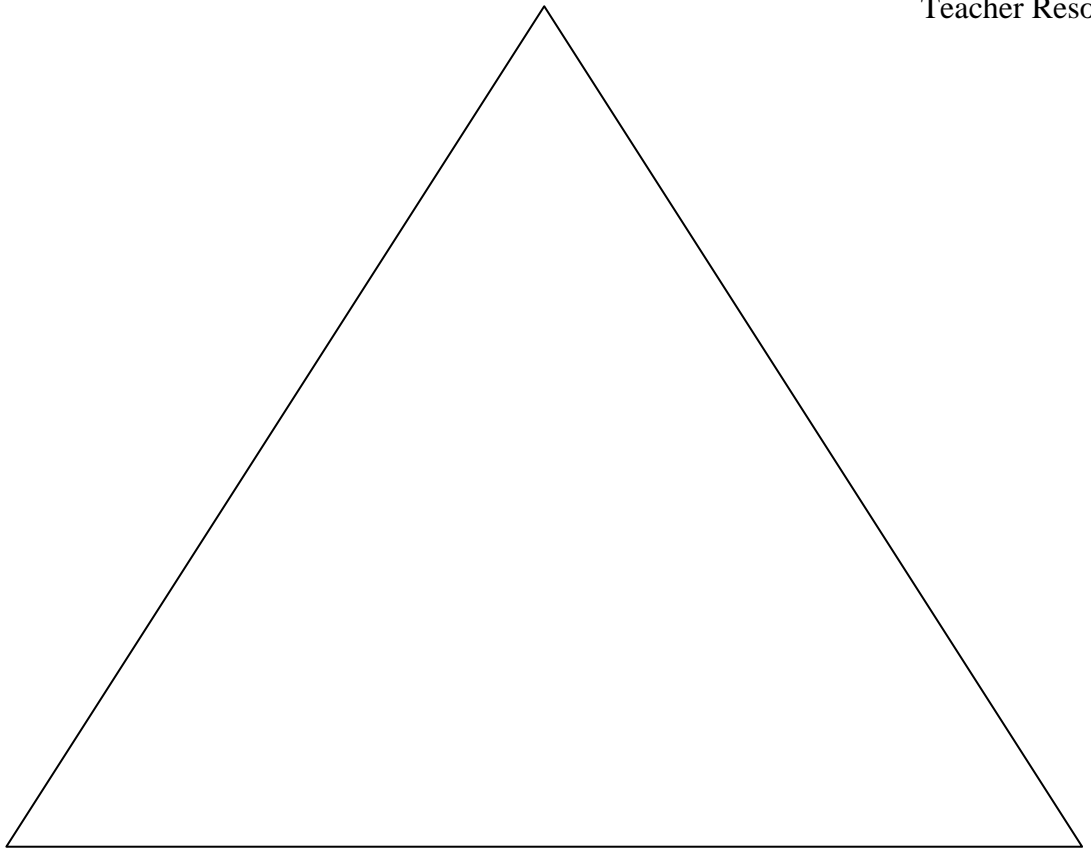


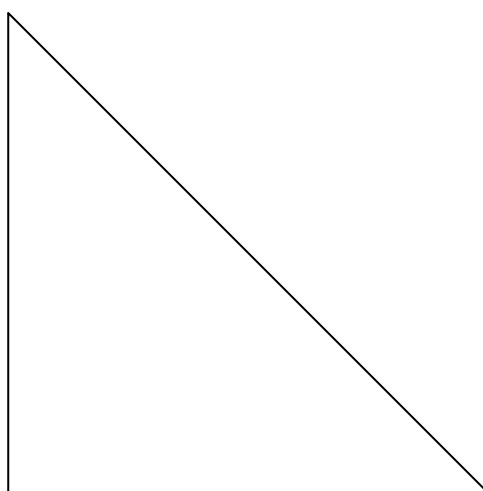
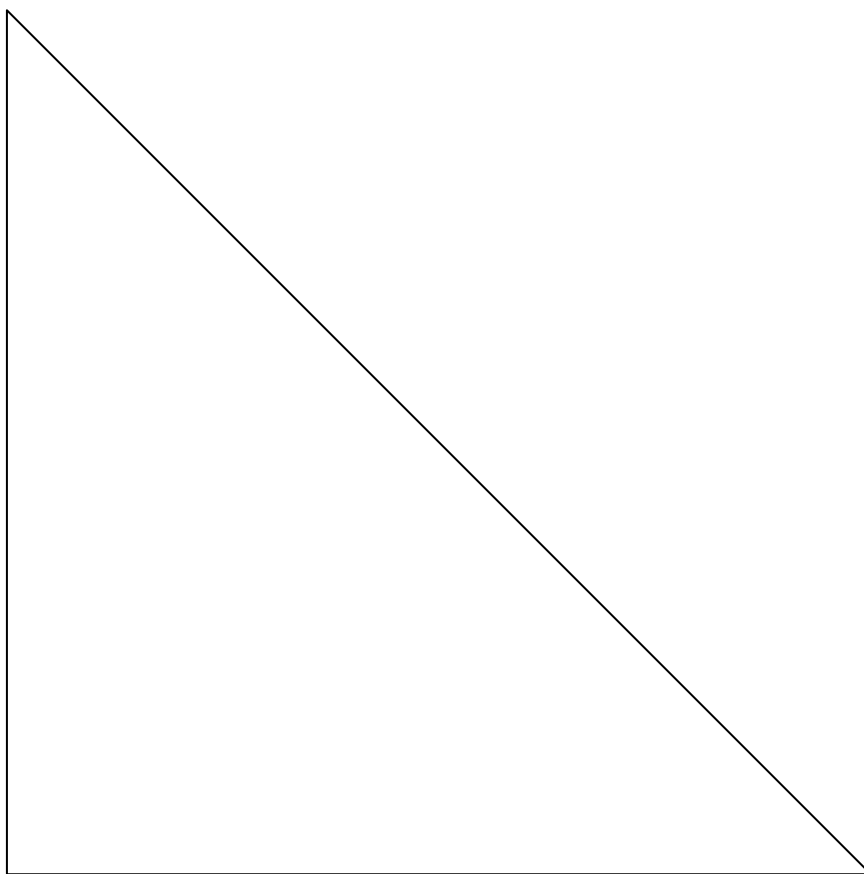


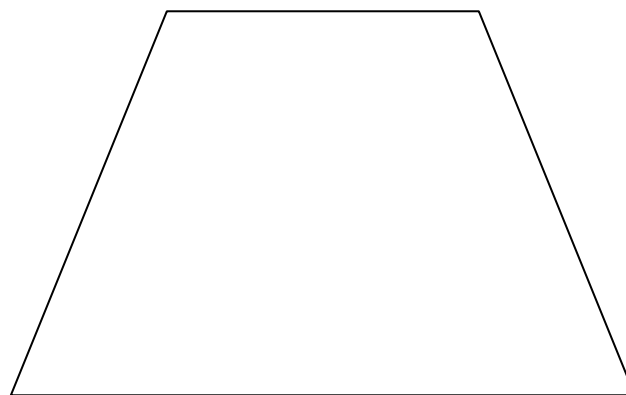
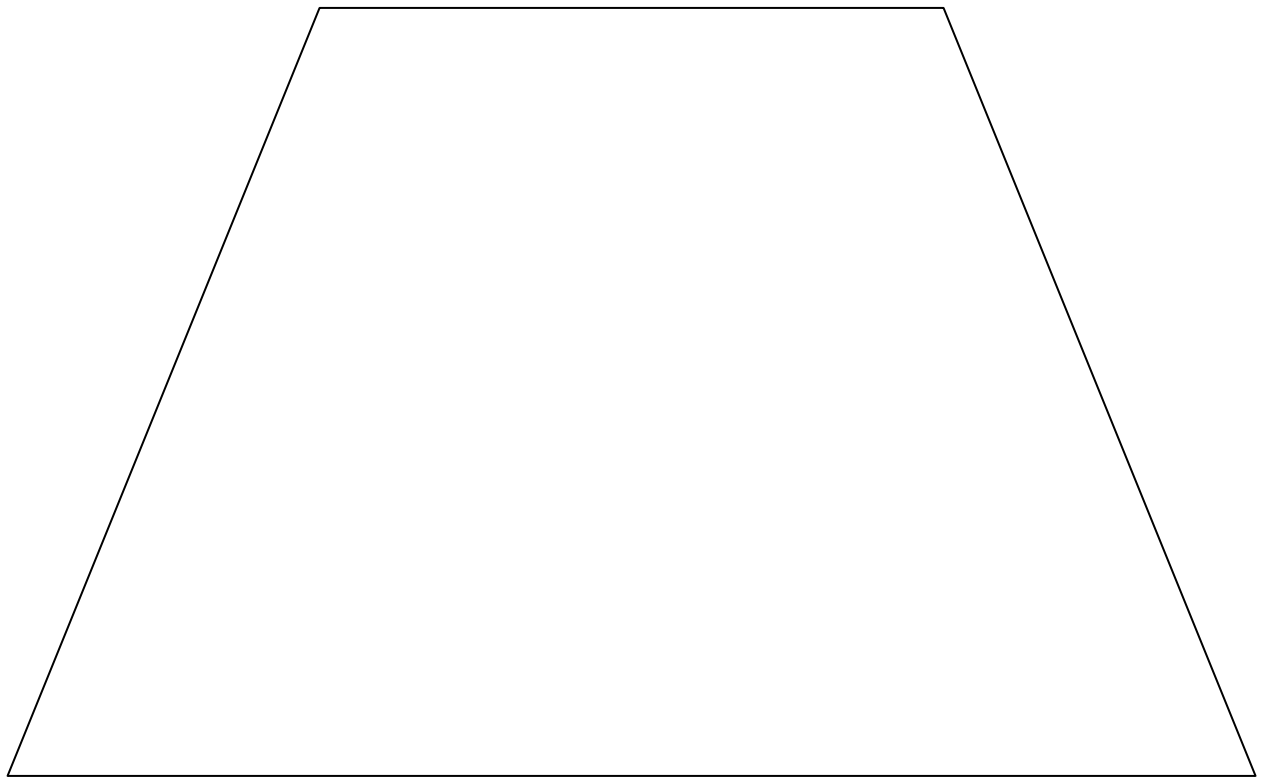


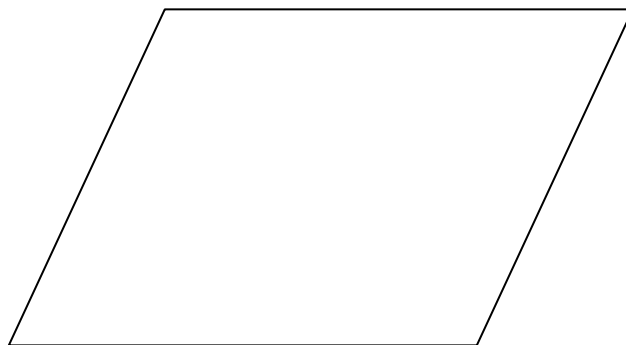
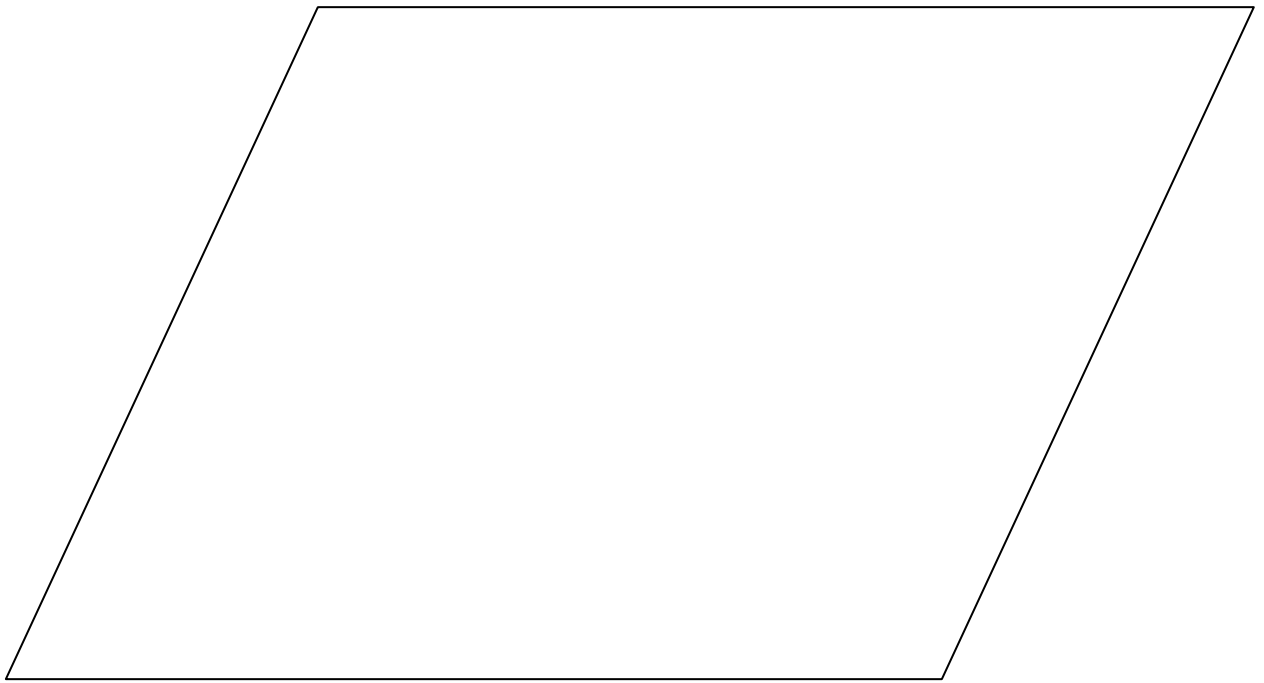


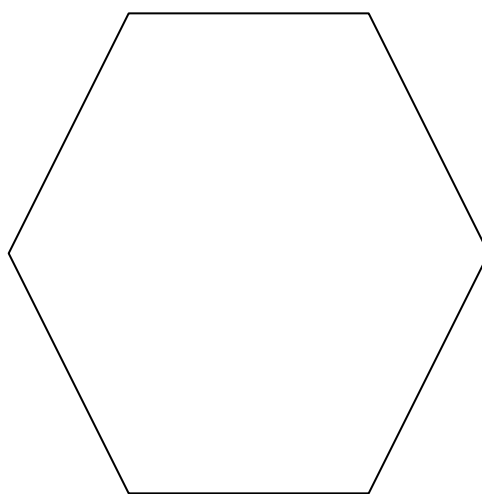
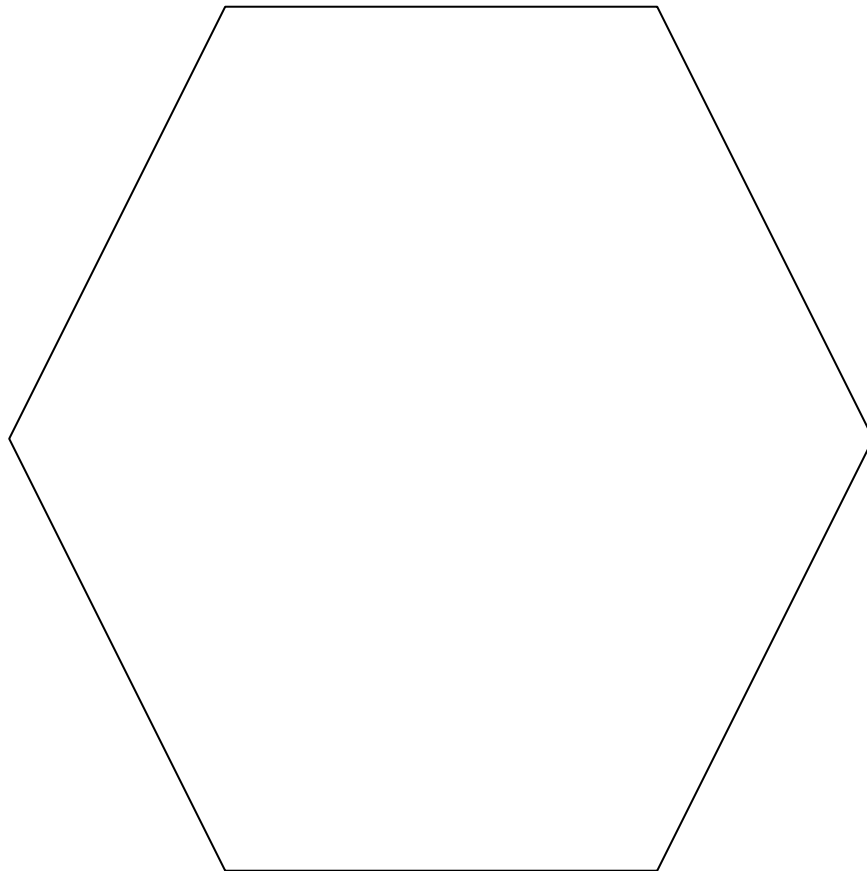








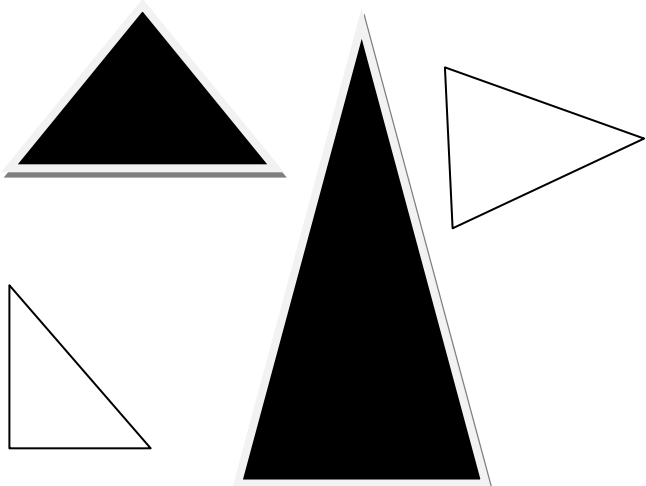
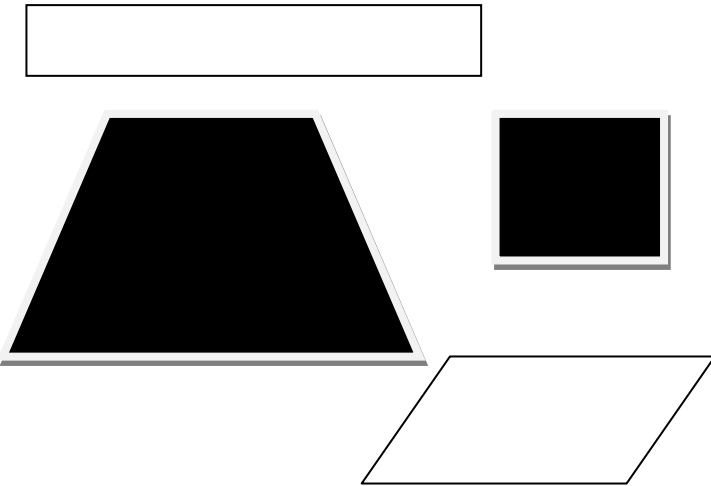
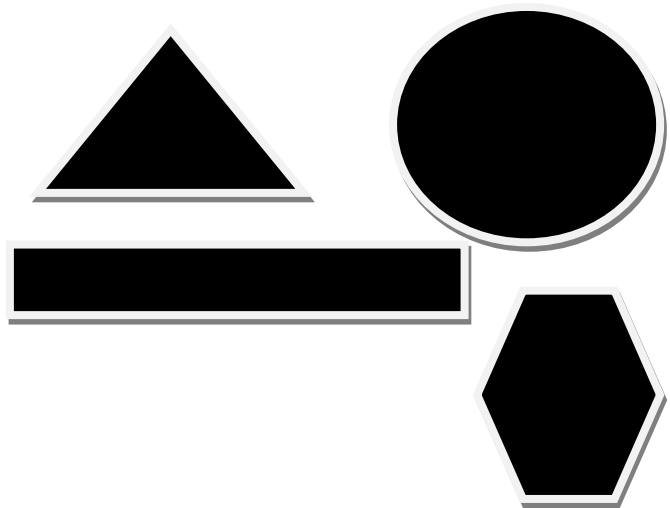
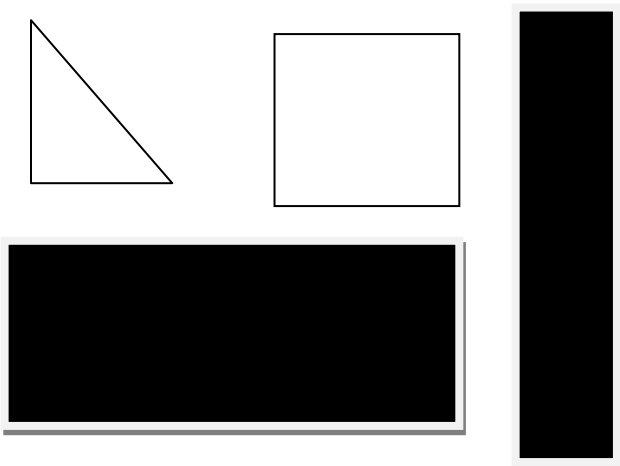




Name: _____ Date: _____

Figure It Out!

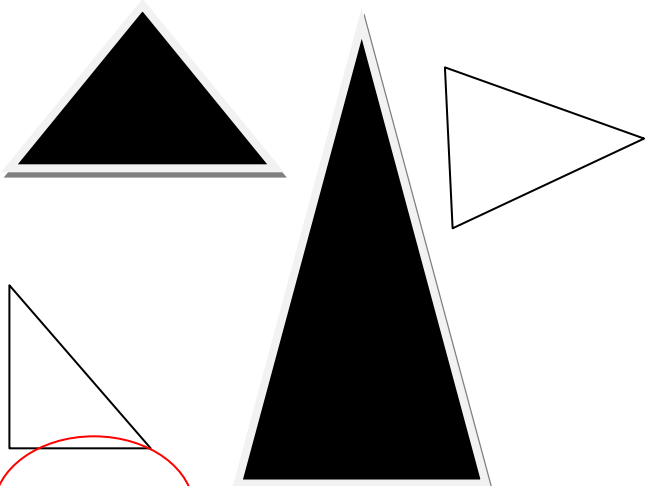
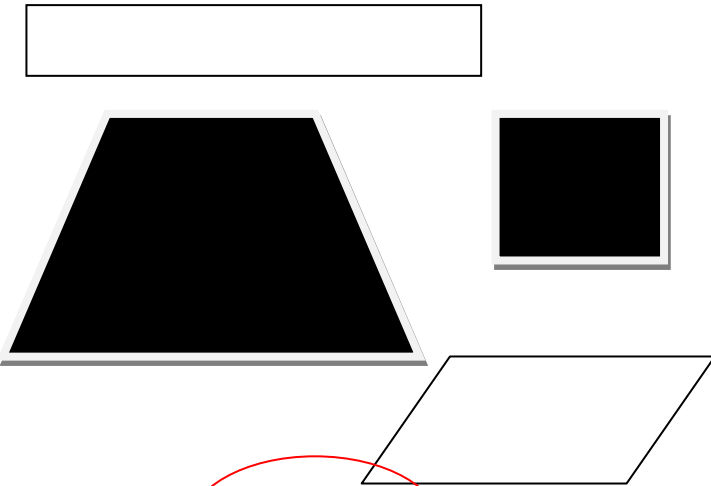
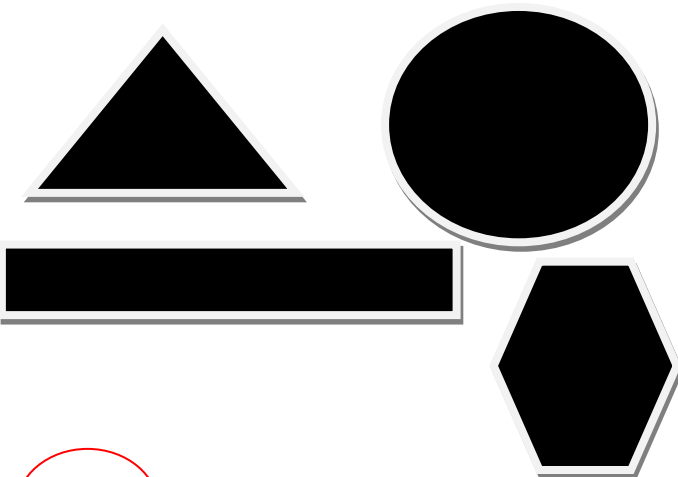
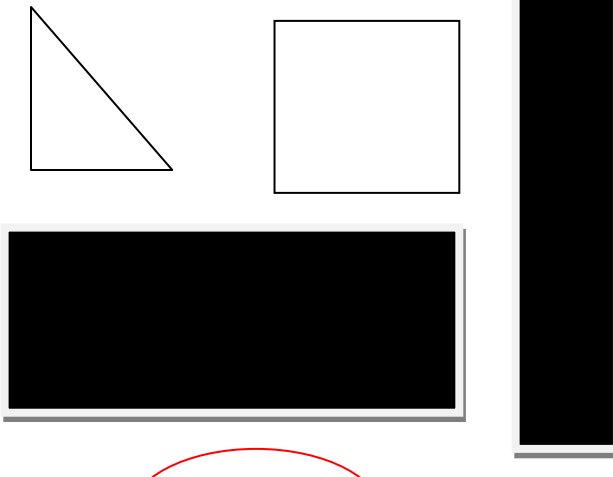
Directions: Look at each group of shapes. Decide what attribute they all share and write the attribute on the line under each group of shapes.

 <p>Answer: 3 sides</p>	 <p>Answer: 4 sides</p>
 <p>Answer: color</p>	 <p>Answer: right angles</p>

Name: _____ Date: _____

Figure It Out!

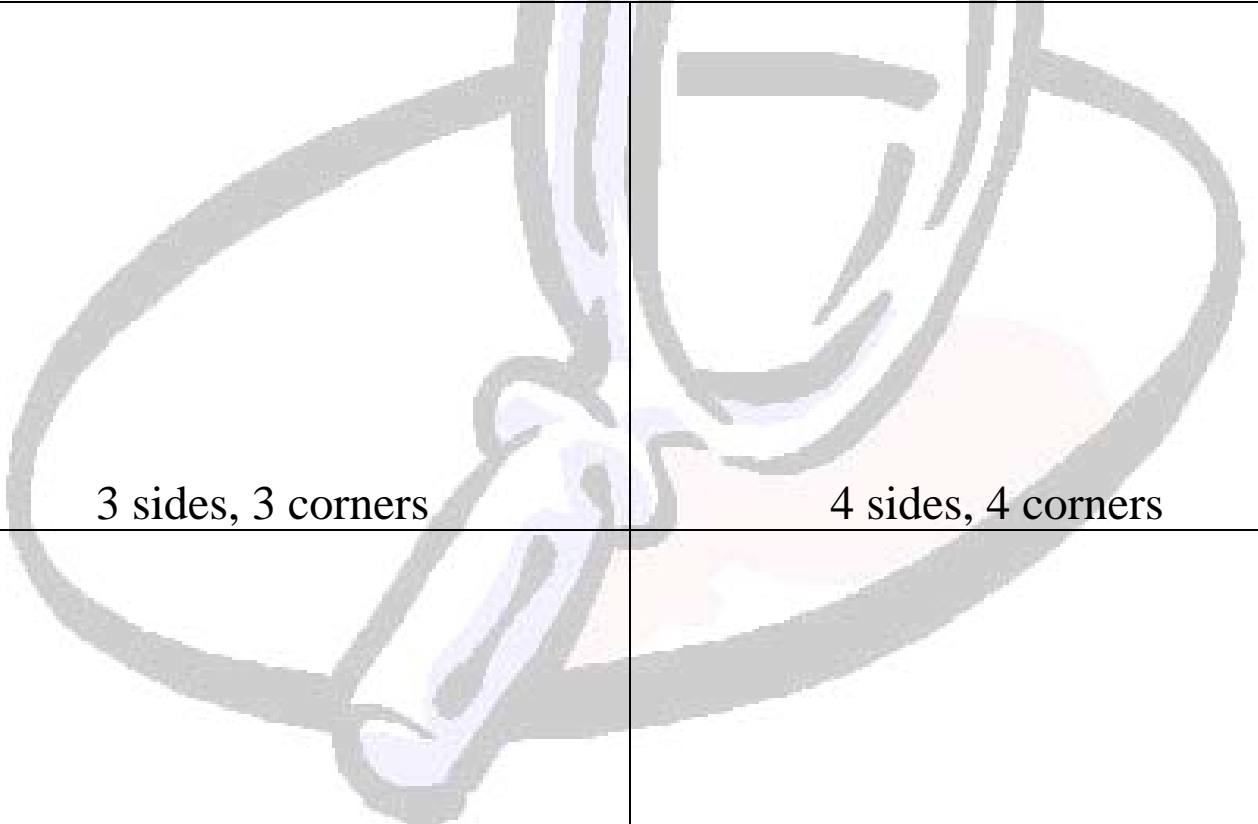
Directions: Look at each group of shapes. Decide what attribute they all share and circle the attribute.

 <p>3 sides right angle 4 corners</p>	 <p>Color 4 sides 3 corners</p>
 <p>Color 3 sides no sides</p>	 <p>3 sides right angle 4 corners</p>

Can You Sort It?

Directions: Cut out the shapes on the attached page. Paste into the boxes based on attribute. Some shapes may have more than attribute. Place the shapes in only one box.

ANSWERS WILL VARY

 <p>3 sides, 3 corners</p>	<p>4 sides, 4 corners</p>
<p>color</p>	<p>Right angles</p>

Detective Notes

Name of Detective:





These are squares.

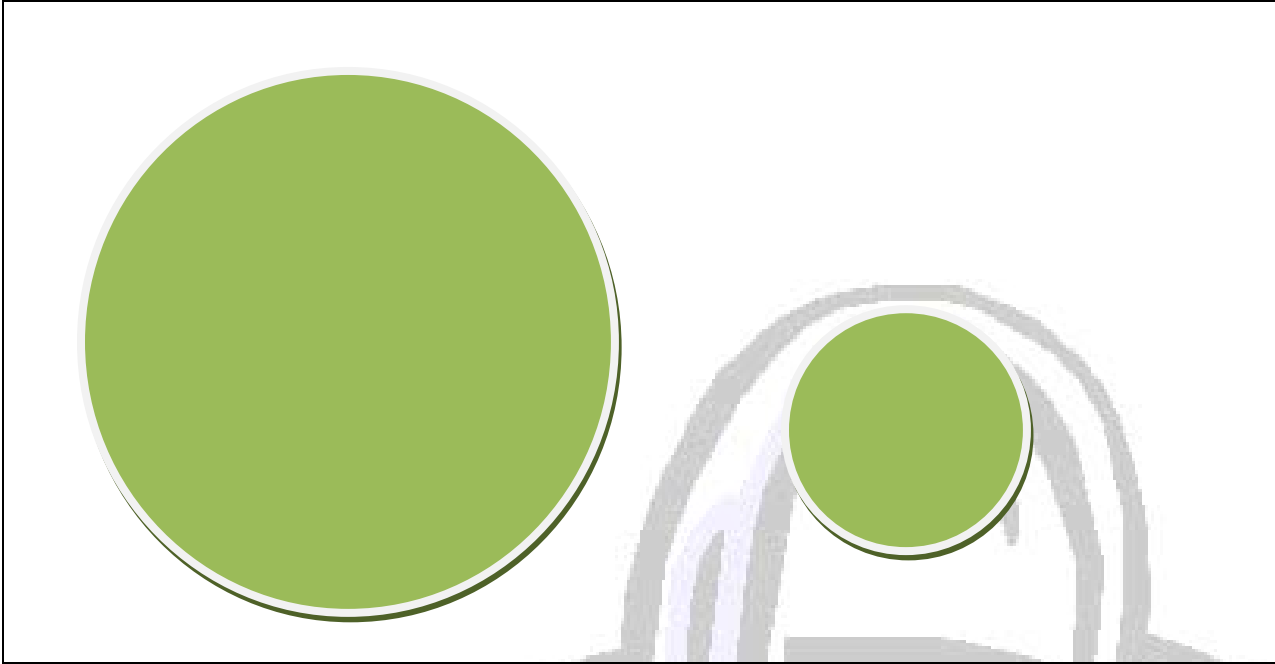
They have 4 sides.

They have 4 angles.

Other observations:

All sides are the same length.

4 right angles



These are circles.

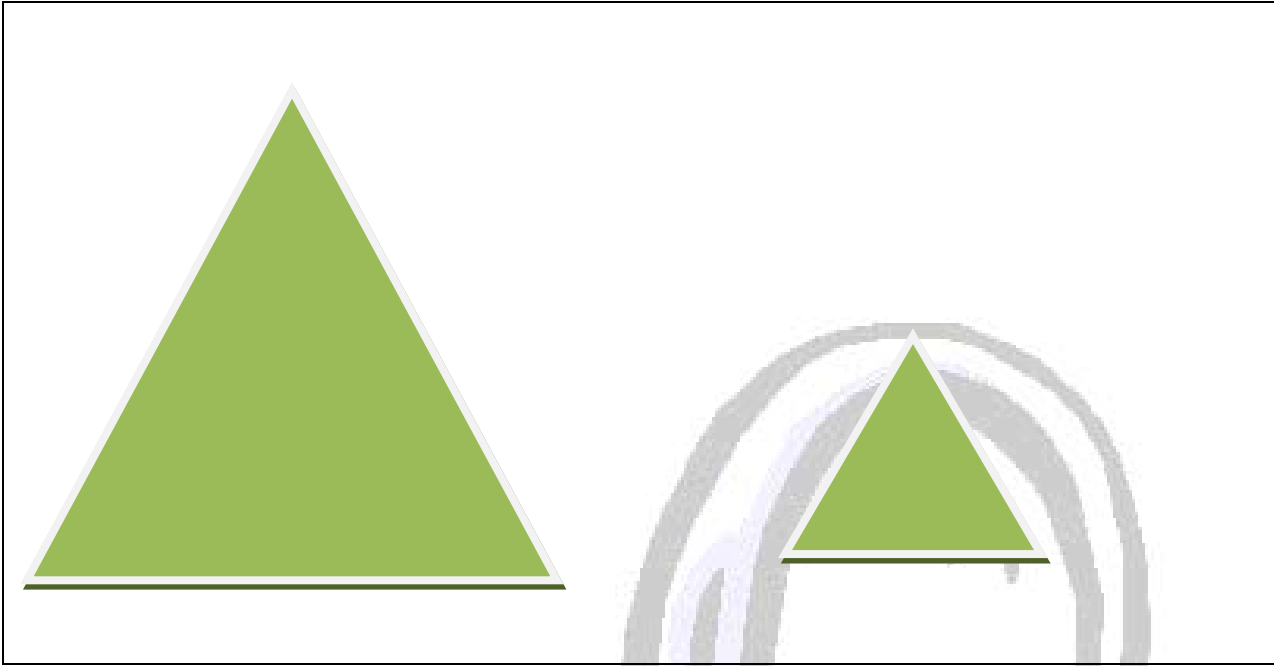
They have no sides.

They have no angles.

Other observations:

Not a polygon

Round figure



These are triangles.

They have 3 sides.

They have 3 angles.

Other observations:

Can have right angles

Is a polygon



These are rectangles.

They have 4 sides.

They have 4 angles.

Other observations:

Has 4 right angles

Opposite sides are equal in length.



These are parallelograms.

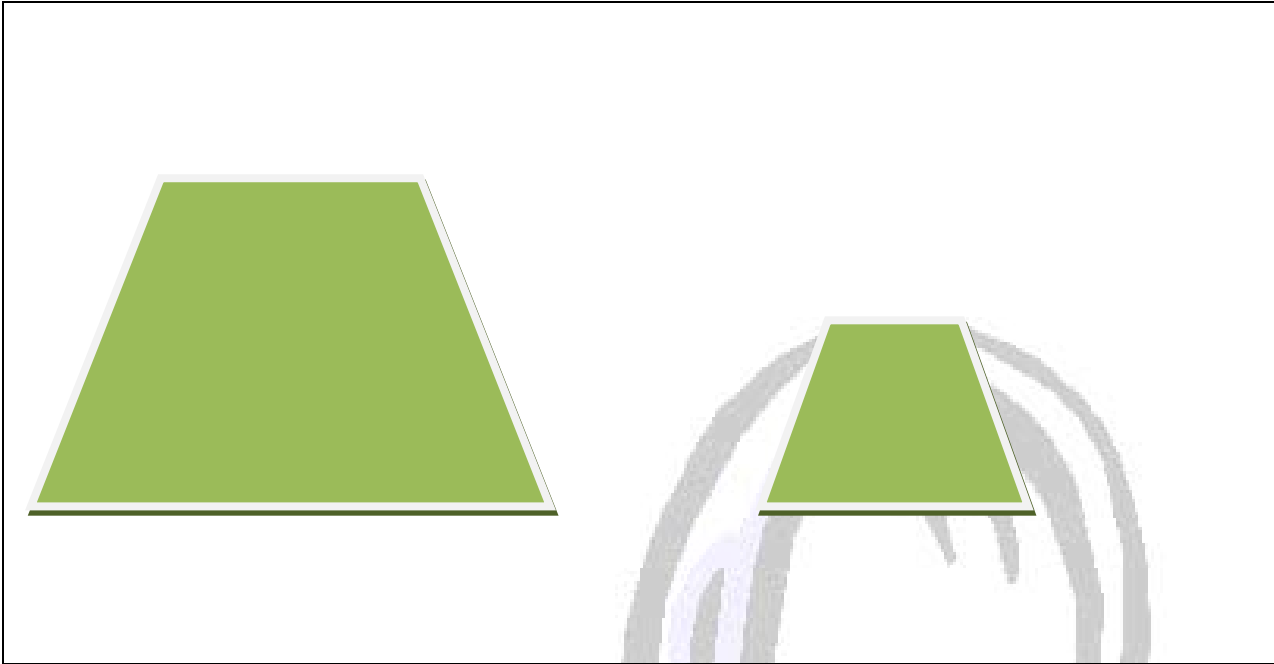
They have 4 sides.

They have 4 angles.

Other observations:

Polygon

Opposite sides are parallel and equal



These are trapezoids.

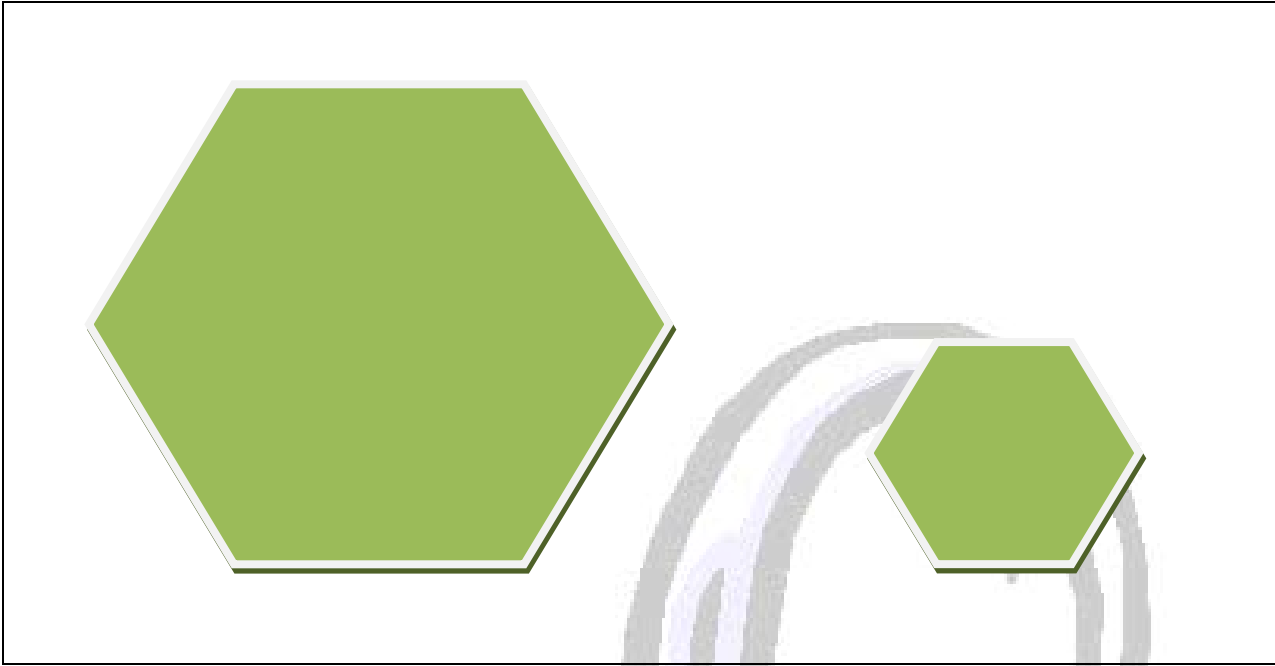
They have 4 sides.

They have 4 angles.

Other observations:

One set of opposite sides is parallel

Polygon



These are hexagons.

They have 6 sides.

They have 6 angles.

Other observations:

Is a polygon

square

Triangle

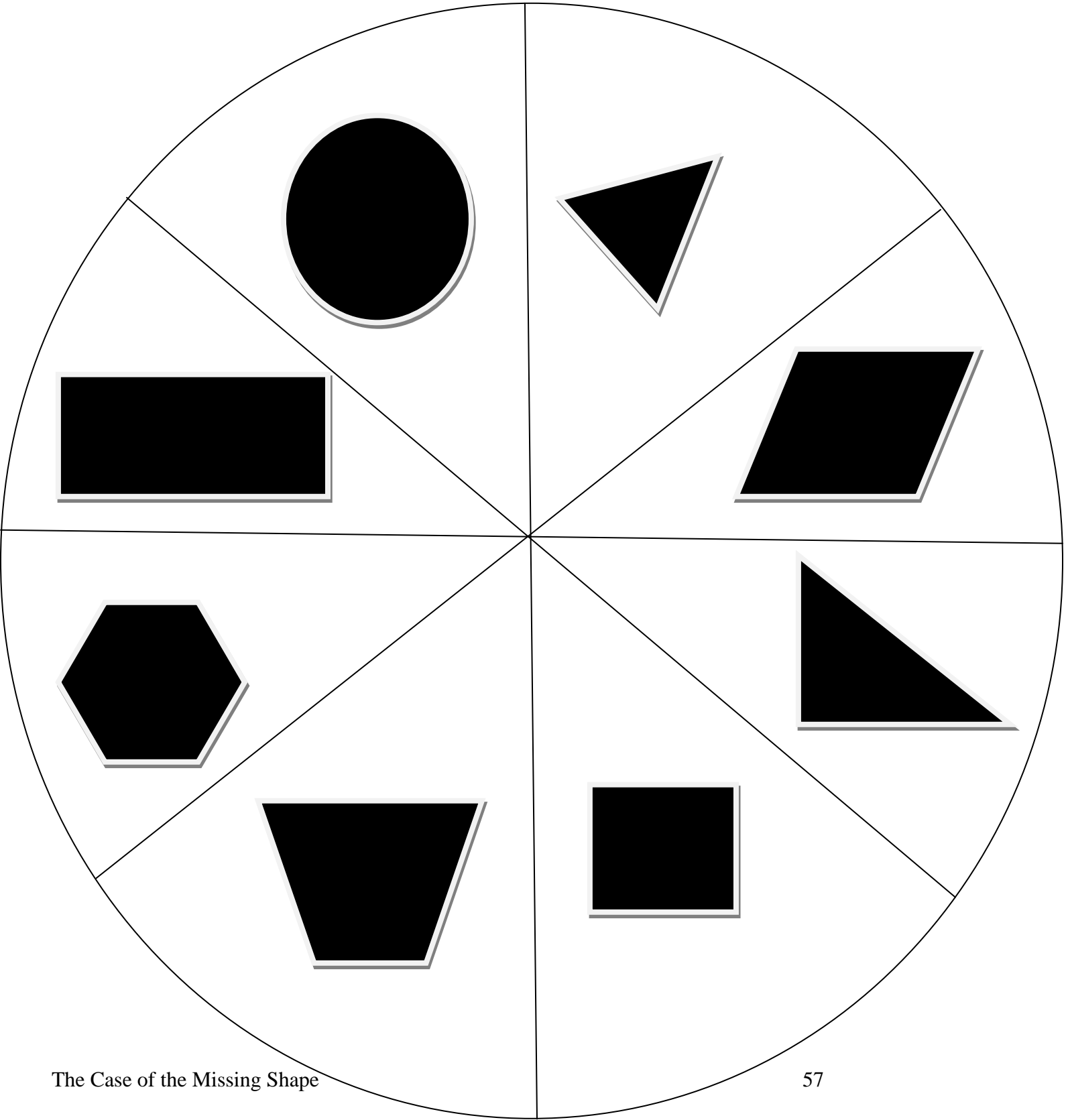
circle

Rectangle

Hexagon

Parallelogram

Trapezoid



Name: _____ Date: _____

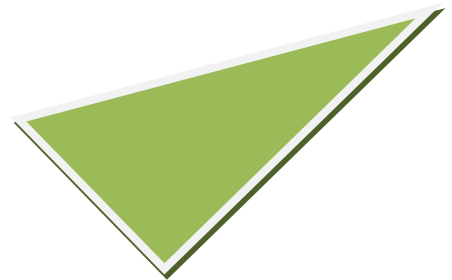
Name That Shape

Directions: Write the name of each shape on the line under the shape!
You can use the word bank to help you if you need it

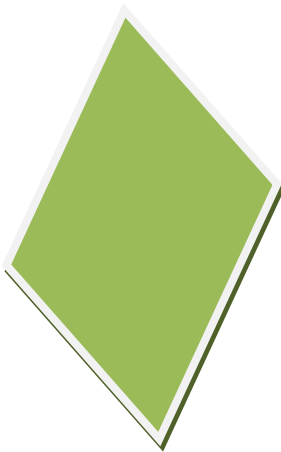
Square	Hexagon	Circle	Parallelogram
Trapezoid	Triangle		Rectangle



Rectangle, Parallelogram



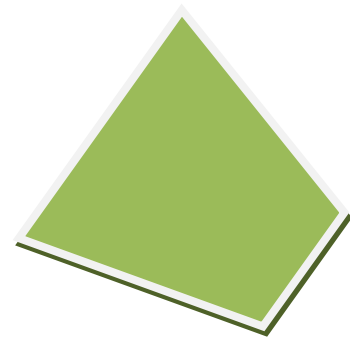
Triangle



Parallelogram



Hexagon

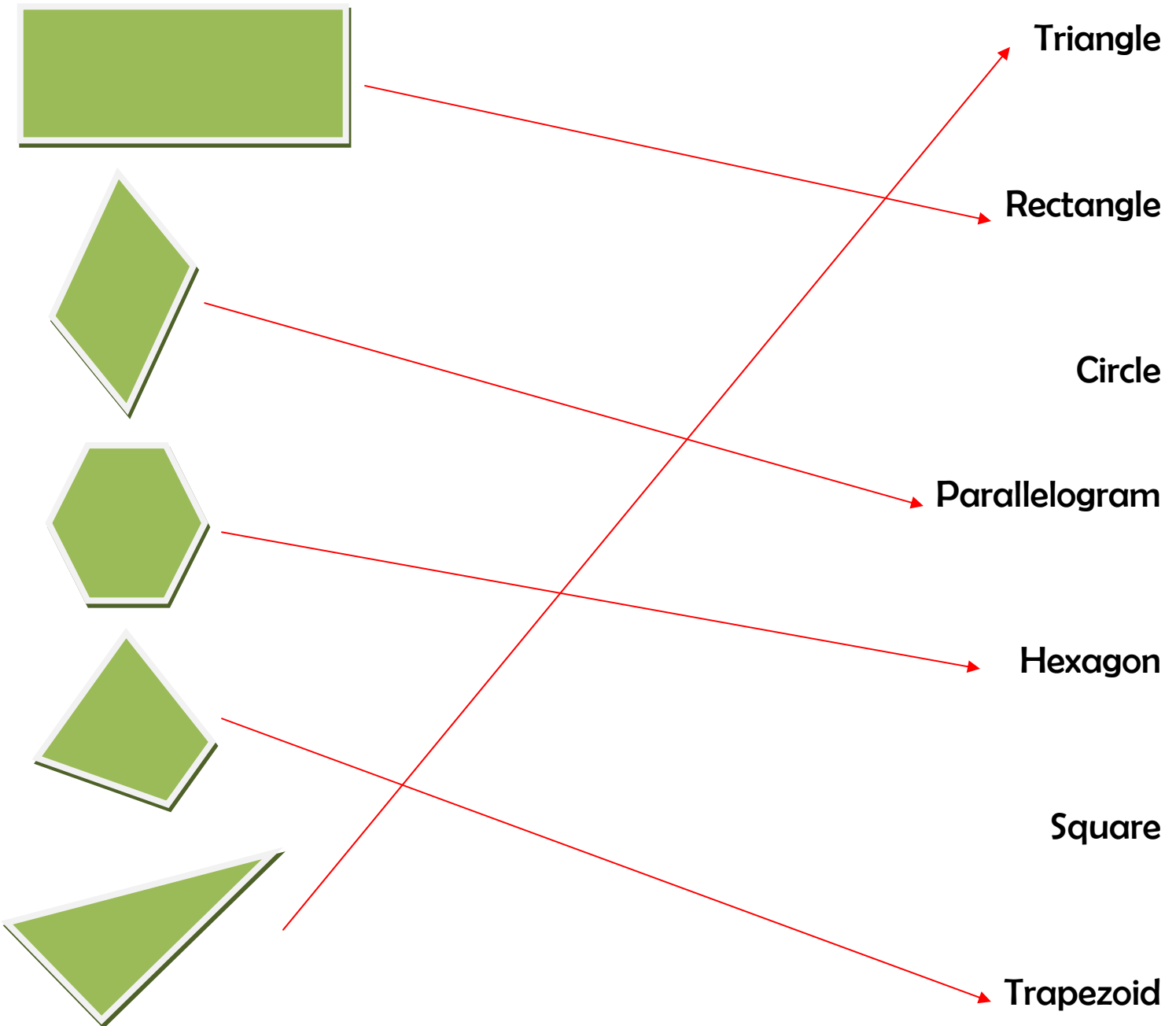


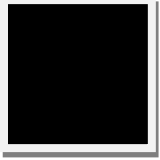
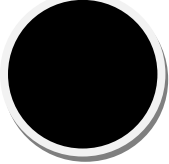
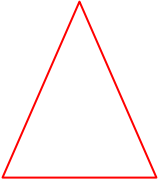

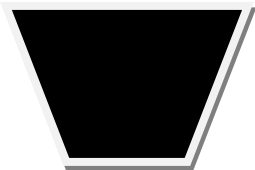
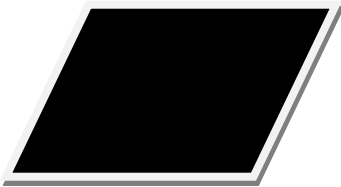
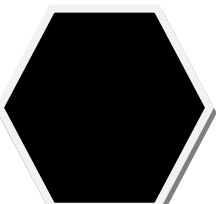
Trapezoid

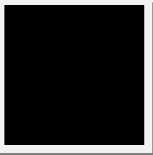
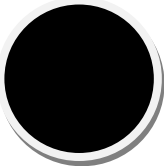
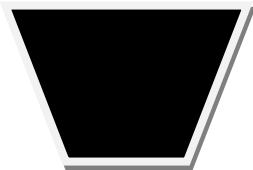

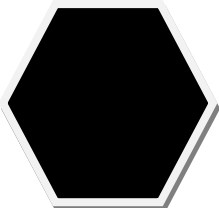
Name: _____ Date: _____

Name That Shape

Directions: Draw a line from each shape to its name!

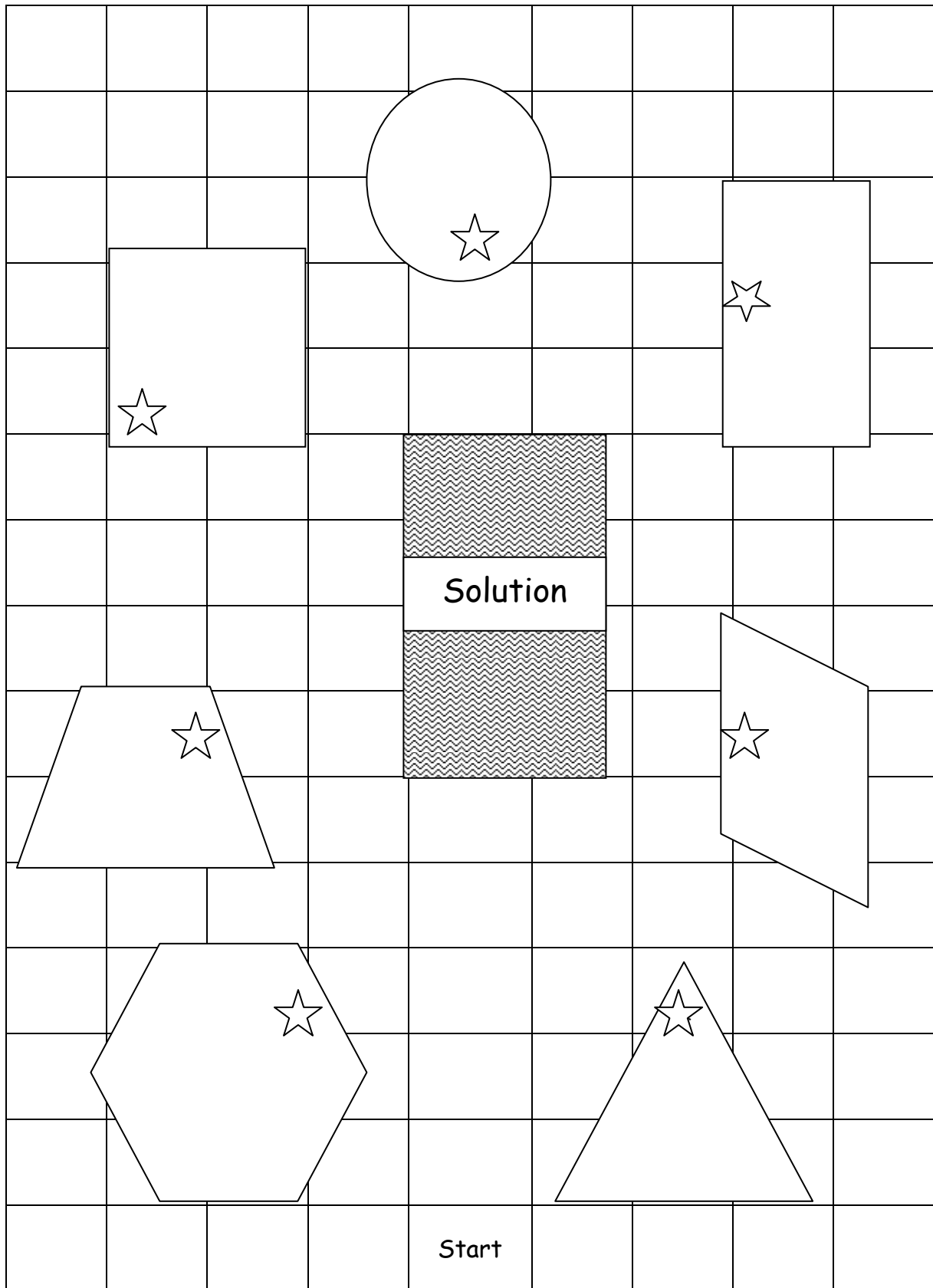


Shape	Name	Attribute
	Square	<ul style="list-style-type: none"> • 4 sides • 4 right angles • All sides equal
	circle	<ul style="list-style-type: none"> • not a polygon • no sides • no angles
	Triangle	<ul style="list-style-type: none"> • 3 sides • 3 angles
	Rectangle	<ul style="list-style-type: none"> • 4 right angles and 4 sides • opposite sides equal • quadrilateral
	Trapezoid	<ul style="list-style-type: none"> • 4 angles • 2 sides parallel • quadrilateral
	Parallelogram	<ul style="list-style-type: none"> • 4 angles • no right angles • opposite sides parallel • quadrilateral
	Hexagon	<ul style="list-style-type: none"> • 6 sides • 6 angles

Shape	Name	Attribute
	Square	<ul style="list-style-type: none"> • 4 sides • 4 right angles • All sides equal
		<ul style="list-style-type: none"> • not a polygon • no sides • no angles
	Triangle	<ul style="list-style-type: none"> • 3 sides • 3 angles
		<ul style="list-style-type: none"> • 4 right angles and 4 sides • opposite sides equal • quadrilateral
	Trapezoid	<ul style="list-style-type: none"> • • •
		<ul style="list-style-type: none"> • 4 angles • no right angles • opposite sides parallel • quadrilateral
		<ul style="list-style-type: none"> • •

Quadriland Game Instructions

1. Separate the 15 cards into two piles, one pile for the color and size and one pile for the sides and other attributes.
2. Shuffle both piles and put the top card from each pile in the center of the game board, face down, on the box marked “Solution” without looking at them. This will be the kidnapped shape.
3. Give each player a detective log (Student Resource 5).
4. Put the remaining cards together and shuffle them.
5. Deal one card at a time, face down, to each player. Players should keep their cards hidden.
6. Each player should check off the cards they have on their detective log.
7. Each player chooses a token. Different colored unit blocks may be used or anything else to mark players moves, as long as there are 4 different colors.
8. Place colored tokens at start position. Each player rolls the die and the highest roll goes first.
9. Roll the die and move the token that number of spaces on the squares. Pieces may move forward, backward, or to the side, but not diagonally.
10. Enter or leave a shape at the spot marked with a ☆ . Your turn ends when your token enters a shape, no matter what the die roll was.
11. Make a guess after entering a shape. You must guess the shape you have entered. For example, if you are in the triangle, you may say “*I think the small green triangle was kidnapped.*” Turn to the player to the left and ask if he/she can prove you wrong. That player must show you and you only, either the card with “Small Green” or “Three Sides, Three Angles.” If the player to your left doesn’t have either of those cards, ask the next player to the left until someone can prove you wrong.
12. When no player can disprove the guess, carefully look at the cards on the solution box making sure that no other players can see them.
13. Win the game when your guess is correct. Lay the cards on the table face up. If you’re wrong, return the cards, face down, to the solution box and you may not move anymore. You can disprove guesses with the cards in your hand.



Quadriland Game Cards

Large Yellow	Small Yellow	Large Red	Small Red	Large Green
Small Green	Large Blue	Small Blue	4 sides 4 right angles All sides equal	not a polygon no sides no angles
3 sides 3 angles	4 right angles and 4 sides Opposite sides equal	4 angles No right angles 2 sides parallel	4 angles No right angles Opposite sides parallel	6 sides 6 angles

Case Summary

Help Poly one last time by completing the Case Summary.
Answer the questions as best you can!

Detective's name: _____

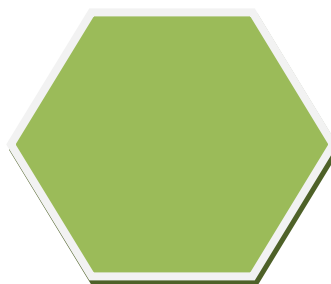
What was the missing shape: _____

1) Which attributes matches your shape? You may pick more than one.

- ☐ a 4 sides
- ☐ b right angles
- ☐ c 3 sides
- ☐ d no sides
- ☐ e all sides equal
- ☐ f 6 sides

2) What is the name of this shape

- ☐ a square
- ☐ b parallelogram
- ☒ c hexagon



3) Parallel means

- ☒ a Lines will never touch
- ☐ b Lines form an angle
- ☐ c Lines intersect

Brief Constructed Response

Hi Detective! You have done such a great job finding out which shape was kidnapped! Now I need you to answer one more question. Finish this BCR and the Case of the Missing Shape will officially be solved!

Your friend,
Poly

Part A

In your game, which shape was taken to Quadriland?

Sample answer: Large Green triangle

Part B

Did the shape belong in Quadriland? Use what you know about shape attributes and quadrilaterals to explain why your answer is correct. Use numbers and/or words in your explanation.

My shape was a triangle and it does not belong in Quadriland. Quadriland is a place for shapes that are quadrilaterals and a triangle is not a quadrilateral. A quadrilateral is a 4 sided shape and a triangle only has 3 sides.

